

# WATTS NEWS



**The Best of Amateur Radio**

## OARC e-Magazine

[www.OgdenArc.org](http://www.OgdenArc.org)

**OCTOBER 2021**

Next Club Meeting/Activity/Events

### In Person—Club Meeting



Dave Mamanakis KD7GR  
President



Justin Hall KB7LAK  
Vice President



Colleen Pike KJ7EAY  
Secretary



J. Siddle KG7CJN  
Treasurer



Mike Wilde KJ7HEX  
Program Director



Cody Hearrell KJ7OHU  
Activity Director



Val Campbell K7HCP  
Webmaster/NL Editor

# OARC Watts News Masthead

[www.OgdenArc.org](http://www.OgdenArc.org)

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## OARC OFFICERS

**President:** Dave Mamanakis KD7GR

**Vice President:** Justin Hall KB7LAK

**Secretary:** Colleen Pike KJ7EAY

**Treasurer:** J. Siddle KG7CJN

**Program Director:** Mike Wilde KJ7HEX

**Activity Director:** Cody Hearell KJ7OHU

## "WATTS NEWS" e-Magazine

**NL Editor:** Val Campbell K7HCP

## "OARC" web site

**Webmaster:** Val Campbell K7HCP

**Postmaster:** Val Campbell K7HCP

**Membership Clerk:** Val Campbell K7HCP

## OTHER CLUB APPOINTMENTS

**VE Liaisons:** Richard Morrison W7RIK  
Gil Leonard NG7IL

Jason Miles KE7IET (IT)

**Repeater Engineers:** Mike Fullmer KZ7O  
Scott Willis KD7EKO

**Photographer:** Kathryn Sutton K8RYN

**Asst Photographer:** Rick Hansen N7EGA

**QSL Manager:** Pete Heisig AI7GV

**Historian:** Kent Gardner WA7AHY

**Antenna Manager:** Gene Morgan WB7RLX

**Club Call Sign Trustee:** Larry Griffin AD7GL

**Club Elmer:** Stan Sjol W0KP

**Social Media Manager:** **Wanted**

**Equipment Manager:** **Wanted**

**Centennial Committee Chair:** Gil Leonard NG7IL

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

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**PREVIOUS CLUB MEETING/ACTIVITY**

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**OARC**

**September Activity/Event**

**Joint (tri-county) Swap Meet**

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**NEXT CLUB MEETING/ACTIVITY**

**OARC**

**October Activity/Event**

**In person - Club Meeting**

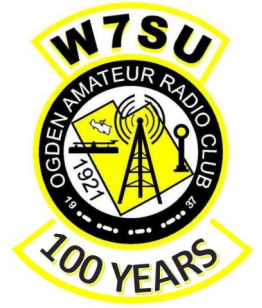
**Keep clicking...**



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## OARC COMING EVENTS

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ARRL Field Day - June  
OARC "T"-Hunt - July  
OARC Steak Fry - August

Joint (tri-county) Swap Meet  
- September

**Christmas Family Dinner Party  
- December**

### **Next VE Test Session**

1st Wednesday 06 October 2021 @ 6:00 PM

**A MESSAGE FROM OUR PRESIDENT**

## Dave's Rag Chew



**Dave Mamanakis KD7GR**

Greetings My Friends!

We need to get a little information out to you!

This Month's meeting, on the 16<sup>th</sup>, will be at UMA, 9am!

We can, if the weather is good, meet out in the parking or we have reserved the cafeteria.

The plan? We are going to do the AUCTION that we normally would have done at the Steak Fry!

It will be a social event, bring stuff to donate to the auction!

If you have stuff you don't need or want, maybe someone else does, and this auction is a great way to move things and benefit the club!

Last Month, I said we'd do the drawing for door prizes, another thing stolen from us by the Thunderstorm that came on the tail end of our Steak Fry.

We drew the winners, and they've been notified, and prizes sent out!

Here is the list of winners:

\$100 DeHEER, David (KJ7DAD)

\$100 SUTTON, Lonnie (N0INC)

\$50 RUSTON, Clay (W1CMR)

\$50 SHOBE, Todd (KW7TES)

\$50 HARRINGTON, Tom (AF7J)

\$50 HUDMAN, Gary Jr (KB7FMS)

Congratulations to these winners, I hope you enjoy the new radio gear you'll buy!

Also, congratulations on keeping your information at the FCC up to date!

Now for something I think is important:

Not just "club fun important" but it could be life saving important!

We are moving into the colder weather and with the way things have been, it might be chaos this winter. It is already cooling off and we could see snow in the next few weeks.

Ham Radio is GREAT for giving you a means of communication when other methods fail. Cell phone are more reliable than ever, but we don't have control over the cell networks, and, like we found out this week, sometimes things go down.

PLEASE, get involved in our Ham-n-Eggs net! It is a GREAT way to get familiar with how to communicate in a net, which are used during emergencies!

You will want to make sure you have a couple things with you in the car:

A radio. Baofeng (\$25) is great for this. A power cord to keep it running off your car.

There are other "tips and tricks" I highly recommend for your safety while driving in the winter weather:

Keep your gas tank more than ½ way full. Once you hit half a tank, fill it up.

Put an emergency kit in your car. It should include a couple things, like some snack foods, and jumper cables.

In fact, visit [BeReadyUtah.gov](http://BeReadyUtah.gov) , they have a great list "Vehicle Emergency Kit" at either:

<https://utahwinterdriving.org/emergencykit.html>

or

<https://drive.google.com/file/d/1SOlvLKjMm0D0sWpqjVxX6Tv5ghft3pUl/view>

It isn't very expensive, and it could save your life!

Another item...

I know there are some people who get on the repeater and they do some annoying things. I won't name any names. We've heard them. They are, indeed, annoying.

Instead of telling them to get off the repeater... I wonder if there is a different way to reduce the annoyance?

My friend, Noji, down in Utah County, is putting together some classes for newly licensed Hams to "bring them up to speed" ...

No, I'm not suggesting that we send people to Provo to learn how to be better Ham Operators. But I am suggesting that, maybe, the class idea is a good one?!

Ideas? Thoughts? Comments? Questions?

I'm open to learn from your opinions on this idea!

Thank You All for being such great members of our Club!

Let's have some fun this winter!

The last item:

JOTA and the Highschool Roundup are going to be happening in a couple weeks... if you'd like to get involved, UMA wants us to be "Radio Active" on those days, and I think he wants us to use UMA's Club Radio!

Get hold of me if you'd like to participate!

[KD7GR@arrl.net](mailto:KD7GR@arrl.net) or text me 801-710-0365.

Thanks!

--Dave (KD7GR)

## **CLUB ANNOUNCEMENTS**



## CLUB NEWS

### HAM and EGGS Net

Tuesday Evenings at 6:30 PM Mountain Time

Mt Ogden **70 cm repeater 448.600 MHz** (- offset, 123.0 PL Tone)

New, Intermediate & Old Timers. Elmering, Education, General Ham Discussion and Rag Chew.

New hams encouraged to check in. Get connected, learn new things and ask questions.

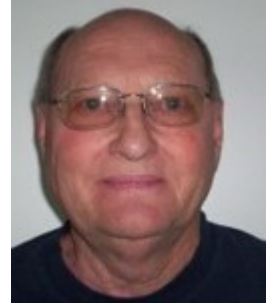
Questions: Larry Griffin AD7GL, [ad7gl@arrl.net](mailto:ad7gl@arrl.net)

Stan Sjol W0KP, [stansjol@xmission.com](mailto:stansjol@xmission.com)



Larry Griffin AD7GL

Stan Sjol W0KP



## CLUB NEWS

### 10 Meter Net

Thursday Evenings at 0200 UTC (7:00 PM MT)

10 Meters HF - **28.385 MHz SSB (USB)**

Purpose is to promote activity on the 10 meter band (especially during low sunspot activity).

To give technician class operators an opportunity to operate phone, and to provide a venue for conversation and experimentation with antenna and ground wave propagation.

Coming Soon: Work toward getting your "10 on 10 Award"

Questions and Net Control: Gene WB7RLX, [ee\\_morgan@outlook.com](mailto:ee_morgan@outlook.com)



Gene Morgan WB7RLX

## CLUB NEWS

### Ham & Eggs Breakfast

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

Now at a new location:

**The Rusted Spoon-Ogden** (previously The Stagecoach)

**1310 Wall Ave, Ogden, UT**

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

A record number attended recently ... 17 total.

73, Dave KJ7DAD



Dave DeHeer KJ7DAD

## CLUB NEWS



### NEXT VE TEST SESSION

1st Wednesday 06 October 2021 @ 6:00 PM

Utah Military Academy - 5120 S 1050 W Riverdale UT 84405

**Important Notice:** Check the club website homepage VE-Test/Classes tab for **requirements** prior to attending a VE Test Session.



**VE Liaison** - Rick Morrison W7RIK [w7rik@arrl.net](mailto:w7rik@arrl.net)



**VE Co-Liaison** - Gil Leonard NG7IL [gil.ng7il@gmail.com](mailto:gil.ng7il@gmail.com)



**VE IT Assistant** - Jason Miles KE7IET

**PREVIOUS CLUB MEETING/ACTIVITY**

## CLUB NEWS



### ***September Simplex Challenge*** - Get Radio Active

Get "**Radio-Active**" and participate in the  
"**September Simplex Challenge**".

The "September Simplex Challenge" has now come to a conclusion.  
However there is no reason not to continue to practice the practices learned this  
past month. Let's keep it going.

Happy Simplex-ing!

## CLUB NEWS

### Joint (tri-county) Swap Meet

[DCARC](#) / [OARC](#) / [UARC](#)



**Photo album available on OARC website homepage.**

**Video Montage available on OARC website homepage.**

## HOBBY NEWS

**The ARRL Board of Directors honors OARC—W7SU on the occasion of their 100th Anniversary**





## HOBBY NEWS

The ARRL Board of Directors honors OARC—W7SU on the occasion of their 100th Anniversary



## HOBBY NEWS

**The ARRL Board of Directors  
Honors the  
Ogden Amateur Radio Club, W7SU**

**On the occasion of their  
100<sup>th</sup> Anniversary**

——  
**Presented by:**

**Jeff Ryan, KØRM  
Rocky Mountain Division Director**

**Dan Grady, N2SRK  
Rocky Mountain Division Vice Director**

**Rick Roderick, K5UR  
President, ARRL**



**ARRL** the national association for  
**amateur radio®**

## PREVIOUS MEETING PICTURES

Photos by ... **club photographers**



Kathryn Sutton— K8RYN



Rick Hansen—N7EGA

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***“Previous Meeting/Activity/Event” ...***

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

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**OARC needs a Social Media Manager**

**Volunteer today!**

**Check out the OARC Facebook page**

**“Ogden Amateur Radio Club”**

**NEXT CLUB MEETING/ACTIVITY**

## CLUB NEWS

### Next OARC Weber County VE Test Session

**VE Test Session:** Wednesday 06 October 2021 @ 6 PM

**Location:** Utah Military Academy (5120 S 1050 W, Riverdale) [MAP](#)

Things you must know before you attend a VE Test Session:

[VE Prep](#) (**important**) NEW!

## **CLUB NEWS**

### **OARC**

#### **October Activity/Event**

**October In-Person Club Meeting**

**3rd Saturday 16 October 2021 @ 9:00 AM**

**Utah Military Academy (5120 S 1050 W, Riverdale)**

**OARC AUCTION (deferred from Steak Fry)**

**Bring your STUFF to donate for Auction.**

**Bring your \$\$ to buy someone else's STUFF!**

**Check the club website homepage for the latest information.**

**CLUB & HOBBY NEWS**

# CLUB NEWS

## Ham Shack Photos

Last month the unidentified Ham Shack Photo was ...

**K7AHD**

**Tom Smith**





## CLUB NEWS

### Ham Shack Photos

The next in the series of unidentified ham shacks is shown below.

**Do you know whose ham shack this is?**



## **CLUB NEWS**

(repeat)

### **Ham Shack Photos**

**STILL WANTED—STILL NEEDED**

**We have been doing this for 27 months now.**

**We will soon ran out of new photos.**

**Send me your Ham Shack Photos soon!**

**Submit to: [k7hcp@arrl.net](mailto:k7hcp@arrl.net) or [w7su@arrl.net](mailto:w7su@arrl.net) or 801.389.0690**

# CLUB NEWS

## Welcome to OARC—Evan Day (previously) WØGOP

Evan joined OARC in May 2021. He was initially licensed in March 1949 as WØGOP. Regrettably over time he let his license lapse however he is now aggressively planning to remedy that problem.

At our 2021 Steak Fry he bid on the OARC silent auction and won. His award was OARC's previous Yaesu HF station: FT890 transceiver and manual antenna tuner. At the September Joint Swap Meet he purchased a switching power supply. Recently he installed a roof top G5RV antenna. So he is ready to go once he re-licenses at the next VE Test Session. Evan, we are rooting for you. GO Evan!

UPDATE: Evan successfully tested and passed both Tech & General at the October VE Test Session.

CONGRATULATIONS EVAN.



STATION CALL SIGN  
**W Ø G O P**

UNITED STATES OF AMERICA  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D. C.

EXPIRATION  
3 y. m. d. s. t.  
**3-16-54**

**AMATEUR RADIO LICENSE**  
(This license issued subject to conditions shown on reverse side)

Operator Privileges	Issuing Officer	Date of Issuance
Class <b>A</b>	<i>[Signature]</i> <b>K</b>	<b>3-16-49</b>

Licensee and P. O. Address:  
**EVAN EDWARD DAY**  
**5515 PILLSBURY**  
**MINNEAPOLIS, MINN.**

Fixed transmitter location: (and remote control position when authorized)  
**SAME AS ABOVE**

F C C 660 NOT TRANSFERABLE

©

*[Signature]* Secretary

Countersigned  
*[Signature]*  
M  
16  
Licensee

## **CLUB NEWS**

**Congratulations to those that successfully tested at the  
06 October 2021 Ogden Weber County VE Test Session**

<b>NAME</b>	<b>CLASS</b>	<b>CALL</b>
<b>Day, Evan E.</b>	<b>General</b>	
<b>Gilmore, Timothy D.</b>	<b>General</b>	
<b>Hart, Blake G.</b>	<b>Tech</b>	
<b>Lay, Bryan K.</b>	<b>Tech</b>	
<b>Lewis, Dustin R.</b>	<b>Tech</b>	
<b>Lyon, Katharine M.</b>	<b>Tech</b>	
<b>Schill, Jason D.</b>	<b>Tech</b>	
<b>Thompson, Michael R.</b>	<b>Tech</b>	

## CLUB NEWS

Alan Parks N7SHA shared this happening with the rest of us. Enjoy!



**Subject:** 3905 CENTURY CLUB

HELLO ALAN (N7SHA)

I JUST WANT TO THANK YOU FOR CHECKING INTO THE

[The 3905 Century Club Worked All States and Awards Net \(3905ccn.com\)](http://3905ccn.com)

PLEASE FILL FREE TO STOP BY AND CHECK IN ANYTIME

73 CHUCK N5WGA

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The 3905 Century club has been around forever. I use to check into it all the time when I first got licensed. That is how I got my first WAS. They have to be one of the oldest nets on 80 meters. They use to also hold a net of 40 meters as well but I don't know if it's still going on.

Back then I lived in Roy and I was using an 80 meter delta loop oriented for east to west propagation. It was a great antenna. And because I was running a full kilowatt I could usually be heard on both coasts and Hawaii. I would often act as relay between the east and west coast and Hawaii.

Gene

## CLUB NEWS

### ANTENNA INSTALLATION AT KW7TES

9-3-2021

Setting up the DX Commander antennae at Todd Shobe KW7TES house.

Pic are of the installation of a DX Commander vertical antenna in Todd's back yard.

25 radials in the ground, 500 feet of #14 strand-ed, insulated wire.

Those assisting and supporting Todd's installation are Gene WB7RLX, Cody KJ7OHU, Rick KF7VAW and Alan N7SHA.



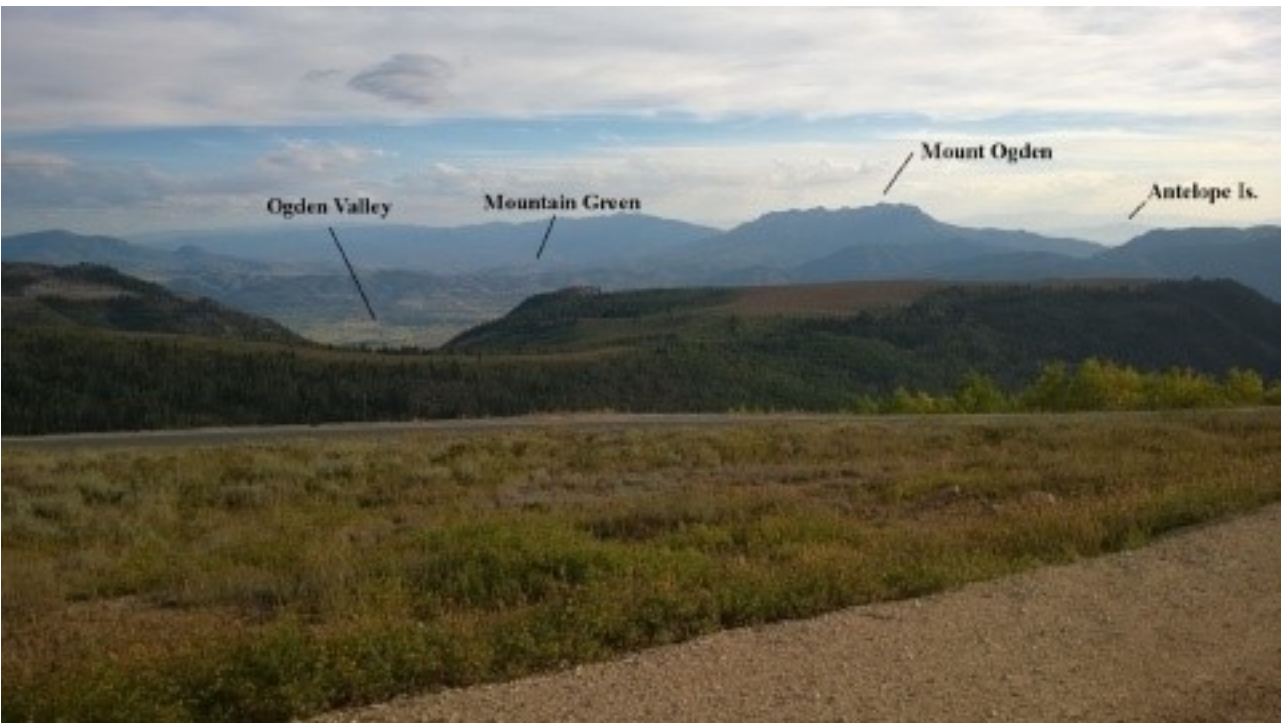
# CLUB NEWS

## Powder Mountain Repeater Site (re-activated)

as of 9/12/21 according to Scott Willis KD7EKO



# CLUB NEWS





# HOBBY NEWS

## NOTE: WSJT-X users

### ***WSJT-X 2.5.0***

Is now in general release and is available on the [WSJT-X website](#).

New features are described in the [WSJT-X User Guide](#) and in the [Release Notes](#).

If you use the new Q65 mode, read the [Quick-Start Guide to Q65](#).

Happy QSO-ing.

# HOBBY NEWS



\*\* CLUB COMMUNICATION \*\*

Club: Utah VHF Society

To: All Active Club Members

From: Melvin T Parkes (NM7P)

Date: Sat, 04 Sep 2021 21:42:23 MDT

Subj: [UtahVHFS] Important Club Communication Don Blanchard, WA7GTU, (SK)

Don Blanchard, WA7GTU (SK) 4 Sep 2021

This morning at about 11:00AM, I dropped by the home of my good friend Don Blanchard, WA7GTU, to pick up some equipment he had requested that we pick up to use for the Utah VHF Society. I was very saddened to hear that he passed away peacefully at his home with family members present earlier this morning. I spent some very special moments with his family and assisted his daughter, Leeann Blanchard, KU7GRL, announce his passing on the Beehive Utah Net as it began today.

Don has devoted significant part of his life helping hundreds if not thousands of individuals learn about electronics and how to become an amateur radio operator. He was responsible for setting up one of the earliest repeaters, if not the first, in Utah. His repeater was issued the first FCC repeater call sign WR7AAA in the seventh call area. Working with repeaters became his passion for amateur radio setting up repeaters and keeping them on the air, he played a key role in establishing the Intertie system many of you have used and enjoy. He has assisted with input to almost every repeater in the state of Utah. He has served as the Vice President of the Utah VHF Society for over twenty years and provided many significant contributions to the Utah VHF Society.

Don was one of the original members of the Beehive Utah Net and served for many years as one of the net control offices managing this ARRL Traffic Net. All the members of the net knew and respected Don he was always there ready to help and assist.

We have lost a giant of a man and I know he will never be forgotten.

For those interested the Blanchard family asked me to announce a viewing will be held from 12:00 to 12:45 PM Saturday, 11 September 2021, with a funeral service to follow at 1:00 PM at the Stake center on 3575 North, Minersville Highway, Cedar City, Utah.

We will all miss Don

Mel Parkes, NM7P

President Utah VHF Society

# CLUB NEWS

(repeat)

## OARC HAM RADIO

### EQUIPMENT LOAN PROGRAM

Check OARC website home page for equipment loan inventory chart.

There may some equipment there waiting for you to try out.

And it's FREE!

73, OARC – W7SU

OARC HAM RADIO EQUIPMENT LOAN PROGRAM									
ITEM #	STATUS	ITEM ID	DESCRIPTION	MFG LINK	DONER (if self managed)	BORROWER	CHECK OUT DATE	RETURN DUE DATE	APROX VALUE NEW
		<b>BASE OR MOBILE (Ax)</b>							
A1	On Loan	QYT KT8900 Base/Mobile Dual Band VHF/UHF Transceiver	25 Watt small footprint pre-programmed	<a href="https://www.amazon">https://www.amazon</a>		K7FDC			\$82
		<b>HAND HELD - HT (Bx)</b>							
B1a	Available	Baofeng UV-5R HT w/battery charger and HT Antenna	VHF/UHF dual band HT pre-programmed	<a href="https://www.amazon">https://www.amazon</a>					\$34
B1b	Available	Baofeng UV-5R HT w/battery charger and HT Antenna	VHF/UHF dual band HT pre-programmed	<a href="https://www.amazon">https://www.amazon</a>					\$34
		<b>POWER SUPPLY (Cx)</b>							
C1	On Loan	Wagan EL9903 Power Converter for med power Base Station	12 Volt - 5 Amp Low Wattage PS can be used on KT8900	<a href="https://www.amazon">https://www.amazon</a>		K7FDC			\$23
		<b>ANTENNAS VHF/UHF (Dx)</b>							
D1	Available	Flexible Whip Dual Band 15" HT antenna Nagoya/Btech	Replaces Rubber Duckie	<a href="https://www.amazon">https://www.amazon</a>					\$27
D2	Available	MFJ-1724B Dual Band Mag-Mount Antenna	Mobile/Base VHF/UHF Antenna	<a href="https://mfjenterprises">https://mfjenterprises</a>					\$35
D3	Available	Arrow "J-Pole" Dual Band Base Antenna	Base station VHF/UHF Antenna	<a href="http://www.arrowant">http://www.arrowant</a>					\$59
D4	Available	Broadband Collinear TRAM Scanner Antenna Resonant 2m & 70 cm	7 Foot Vertical Ant (SO239) w/2 "U" clamps Base Station use	<a href="https://www.amazon">https://www.amazon</a>					\$68
		<b>TEST TOOLS (Ex)</b>							
E1	Available	VOM Volt-Ohm Multi-Meter	Measure Ohms, Volts, Amps	Radio Shack					\$30

... and may more items for loan (over 40 items available)

## CLUB NEWS

(repeat)

**WANTED...**

**OARC EQUIPMENT MANAGER**

---

Consider the rewards awaiting you to volunteer for this rewarding and thrilling opportunity. *Hurry because this opening will go fast.* Contact our club president to secure your role in this position. .... ..

Thank you everyone.

73, Val Campbell K7HCP

## CLUB NEWS

(repeat)

**WANTED...**

**OARC SOCIAL MEDIA MANAGER**



Consider the rewards awaiting you to volunteer for this rewarding and thrilling opportunity. *Hurry because this opening will go fast.* Contact our club president to secure your role in this position. .... ..

Thank you everyone. 73

**CONTRIBUTING EDITOR SUBMISSIONS**

## GUEST ARTICLE

by Kent Gardner WA7AHY



### Hints and Hacks for Ten-Tec Owners

Continued saga of Allen wrenches to remove radio dial knobs (See September 2021 issue).

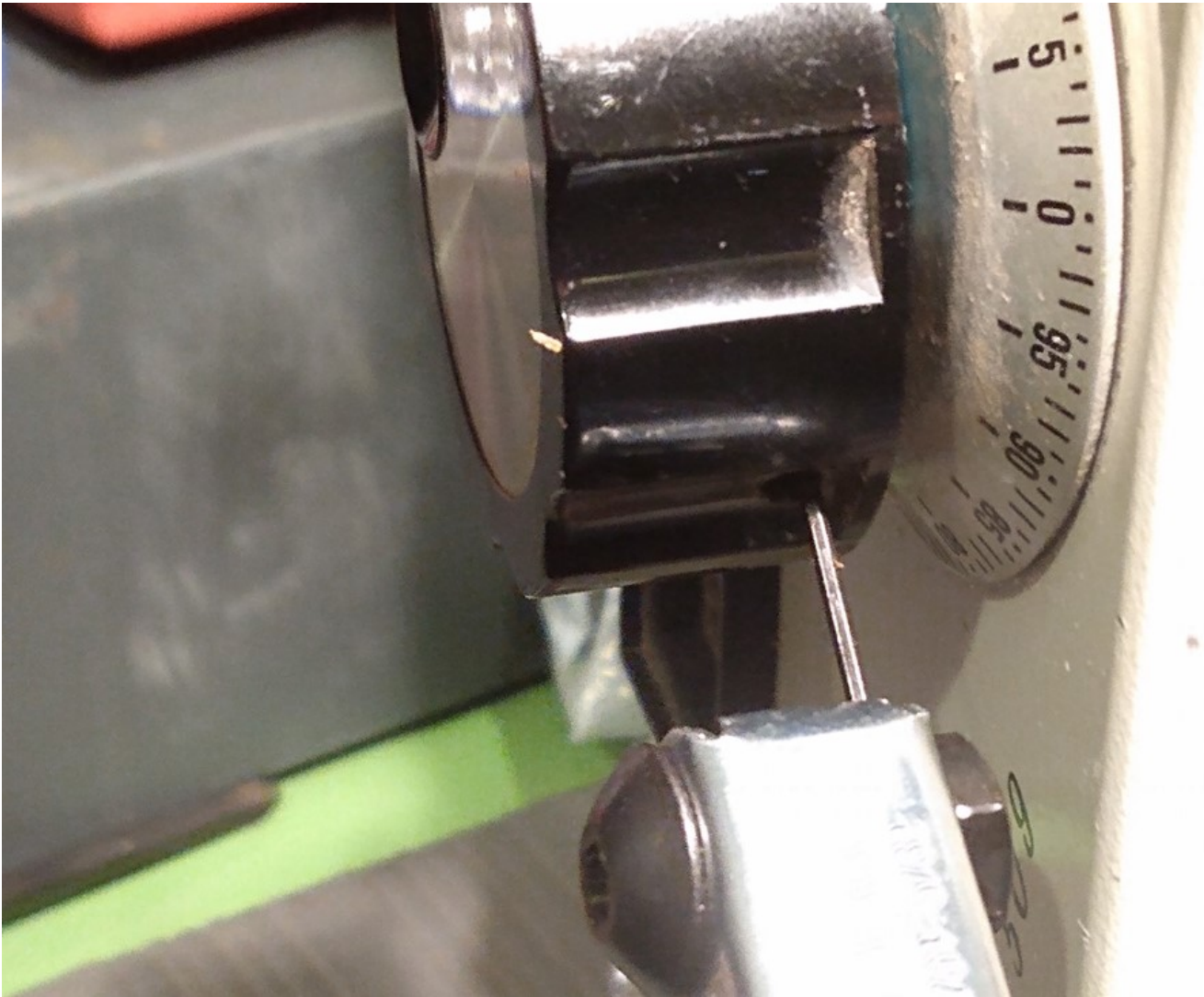
Last month I had troubles removing the tuning knob for my Kenwood TS-2000 Transceiver. It took some searching to find a  $1/16^{\text{th}}$  Allen wrench to do the job after figuring out how to remove the rubber traction shell that exposed the Allen socket screw.



I just had the same problem with my Ten-Tec Argonaut 509 (above). The continuous wave (CW) stopped working last year, but I could still do single-sideband (SSB). On my last camping trip in July, my rig stopped doing SSB also.

In order to take the covers off the rig I had to remove all the knobs. Wouldn't you know it, none of my Allen wrenches would fit. Only the band-switch knob came off with my pocket flat-bladed screwdriver. I fretted for several hours trying to find the correct size Allen wrench, but to no avail.

I had to, of course, go to the instruction manual and found that the size I was to look for was **.05**. The set I bought for the Kenwood dial started with  $1/16^{\text{th}}$ . I went to Lowes, Home Depot and Walmart. The only .05s that I found were in expensive kits ranging in prices from \$18 to \$39. I just couldn't pay that much to only use one wrench.



I tried to use another small Allen wrench by grinding it down, but it was just too small and too difficult to make it five sided. The best I could do was making it a toothpick.

I figured that I should go out to Smith and Edwards to see if they had some sets/wrenches at a more reasonable price. After making a run to Smith's on 40<sup>th</sup> and Harrison for groceries, I thought I just might stop at the ACE Hardware close by.

Lo and behold, I found a set by Eklind for \$8 that not only included the **.05** wrench, but also the **1/16<sup>th</sup>** that I could use for my Kenwood knob. Using the **.05**, all the rest of the knobs came off without any more problems. Now, I just have to troubleshoot why my CW and SSB doesn't work. I did determine that it still receives signals since I used my Kenwood as a signal source on 80 and 40 meters.

TNX

Kent Gardner, WA7AHY



# GUEST ARTICLE

by Dan KB6NU



## Apply for a grant from the ARRL or ARDC

By Dan Romanchik, KB6NU

*In our division director's September missive to the membership yesterday was this nugget:*

*ARRL IS CURRENTLY OFFERING GRANTS to fund amateur radio projects. This program, sponsored by the ARRL Foundation, is specifically for organizations and aimed primarily for education, licensing and support of ham activities. A special focus is on youth-related plans. We are now entering the last phase of this year's grant cycle, so the opportunity exists for your club or organization to submit a grant request. You can find the full details on the grant page of the ARRL web pages, check: <http://www.arrl.org/amateur-radio-grants>.*

*The ARRL accepts grant requests three times a year:*

*February 1 – February 28*

*June 1 – June 30*

*October 1 – October 31*

*Since this is September 1, you have two months to get your request in. As I've written before, our club was awarded \$1,500 to help us put up a tower for a club station at the Ann Arbor Hands-On Museum. The money is available. Go get it!*

*Get money from ARDC, too!*

*You can also get a grant for amateur radio projects from Amateur Radio Digital Communications (ARDC), the outfit I'm currently working for. ARDC grants money for projects that fall into one of the following three categories:*

*Support and growth of amateur radio,*

*Education, and*

*Technical innovation.*

*ARDC has, for example, awarded grants to:*

*An amateur radio club in Wisconsin (<https://www.ampr.org/grants-old/grant-chippewa-valley-arc-emergency-trailer-and-equipment/>) for upgrading their repeater systems and building an emergency communications trailer that they will also use to promote amateur radio in their area.*

*A California high school (<https://www.ampr.org/grant-incorporaing-constructivism-and-the-maker-mentality-at-california-high-school/>) whose computer science teacher will use the funds to purchase microcontrollers and transform his classroom into a maker space. With this equipment and facility, students will learn computer science by building their own projects.*

*The M17 Project (<https://www.ampr.org/grant-m17-open-protocol/>), whose goal is to develop a new, open-source digital radio protocol by hams, for hams, and that is easy to understand and build on.*

To be eligible for an ARDC grant, an organization must be a 501(c)(3) public charity or be sponsored by a 501(c)(3) public charity. Other eligible organizations include government entities, schools or universities, and international charities or nonprofits.

For more information on ARDC and how to apply for an ARDC grant, go to <https://www.ampr.org/apply>.

=====

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>). He recently joined ARDC as their Content Manager. Among his responsibilities is spreading the word about all the cool things ARDC is doing for amateur radio.

#### EDITORS:

You can find an image of the ARRL Foundation logo at <https://www.kb6nu.com/wp-content/uploads/2019/07/arrl-foundation-425x174.png>.

An image of the ARDC logo is at <https://www.ampr.org/wp-content/uploads/square-512.png>

## GUEST ARTICLE

by Gene Morgan WB7RLX



# The G5RV – Setting the Record Straight

By Eugene Morgan – WB7RLX

The subject of the G5RV has often come up and many people have characterized my position of not being a fan of this misunderstood antenna. So much so that some started to tease me about putting a G5RV in there attic. But in total honesty, I'm not a fan of the attic based GR5V. In this article I hope to set the record straight regarding my position in regard to the G5RV and to dive into some of the technical aspect of the antenna and explain why it is perhaps not the best choice for an attic antenna. I will however offer some alternatives to the G5RV.

I also want to state that the intent of this article is to educate, not to chastise or belittle. Please understand that I speak from personal experience and when it comes to antennas I've probably made more mistakes than anyone. My hope is to share what I have learned from both firsthand experience and from what I have read and researched over the years.

The G5RV was invented in 1946 by Louis Varney, whose call sign was strangely enough G5RV. He was in search of a 20 meter antenna that would fit on his garden. The original article describing the G5RV appeared in the R.S.G.B Bulletin in July of 1958. It should be noted that the antenna he describes in his article is not the same as the G5RV that is in common use today. In his original design he uses an open wire feeder of a "convenient length" with feeder taps specific to each band, see Figure 1.

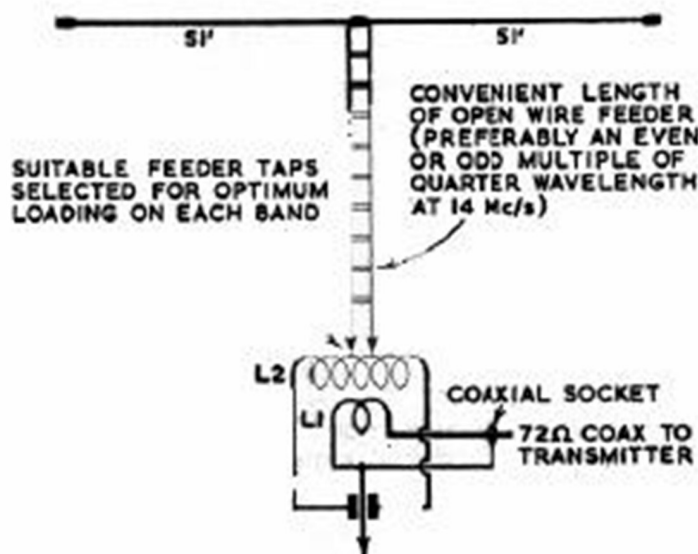


Figure 1: Original Varney G5RV Design

Additionally Mr. Varney was a bit unclear on a number of other aspect of the antenna, specifically the matching section of open wire line or 300 ohm line; a feeder comprising 50 ohm coax, 80 ohm coax, 75 ohm twin-lead, or no feeder at all. Then there was the question of the balun: balun, no balun, or an HF choke? So it's no surprise that there are a diversity of opinions regarding the actual construction of a proper G5RV. Today's G5RV is typically of the design describe in the ARRL Antenna Handbook although there are several popular variations such as the G5RV Junior and the ZS6BKW.

Since its invention the G5RV antenna has become one of the most popular and widely used "all around" multi-band antennas in the world. Even though it is not a truly multi-band antenna and uses a feedline that can be problematic if not installed correctly. It does have good overall performance on most HF ham bands when used with an antenna tuner. It's fair to say that some internal tuners do struggle with matching the G5RV simply because they don't have enough range to "tune" this all band wonder on all the HF bands from 80 meters on up.

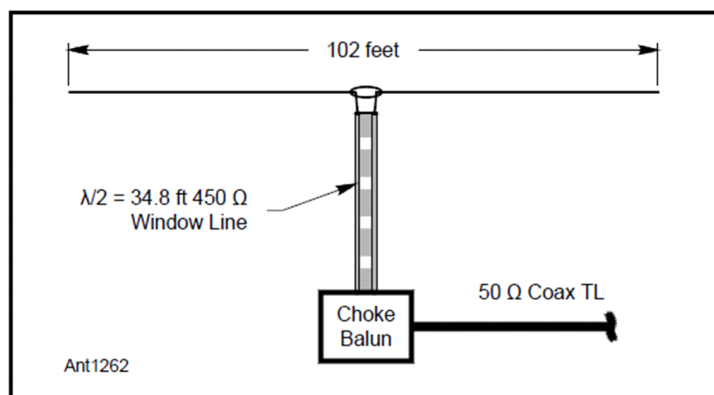


Figure 2: The basic G5RV as describe in the ARRL Antenna Handbook

Before we go on I want to touch on two idea's that often are a part of the discussion when it comes to the G5RV and are often given as reasons some decide on the G5RV.

## A Common Myth – the Multi-band Antenna

Let's talk about the idea of an all band antenna. I'll begin by saying there's no such antenna. I put it in the same category of the mythical isotropic radiator. Many of the antenna's that are considered to be multi-band are not when you look closer. For example there are the fan variety, the DX Commander being a perfect example. In reality these antennas include an element for each band of operations. Another variety use some type of electrical device such as a trap or tap coil to achieve multi-band status. Another multi-band antenna uses a series of motors to lengthening or shorting the elements in order to cover more than one band. Let me extend this thought even further, there no such thing as a multi frequency antenna. Physics requires that an antenna will be resonate at only one frequency and the harmonics of that frequency.

Every antenna has a built in resonance at some frequency. When you operate the antenna away from its resonant frequency or between its harmonic frequencies the SWR starts to go up. The further away from the resonate frequency you operate the higher the SWR. If you operate the antenna beyond a certain SWR limit the transmitter will start to throttle back the output power. If you want to operate an antenna outside of its sweet spot then an antenna tuner needs to be added to the antenna system in order to extend the frequency range of the antenna system while still allowing the transmitter to see a 50 ohm load. This is true for practically all antennas. I once heard Dave (KD7GR) refer to this phenomenon as a game called "Will it Tune?" Which I thought described the situation perfectly.

What this means is because there is no such thing as a multi frequency or multi-band antenna nearly all antennas will use some sort of a device to make it multi-band or at the very minimum broad banded. This would infer that there is nothing unique about the G5RV when it comes to being a multi-band antenna. Virtually any antenna when coupled to a proper tuner can become a multi-band antenna.

## Anecdotal Antenna Performance, Can They Be Trusted?

There's another concept that I want to also mention which will be important to understand as we start to go deeper into the G5RV. "Everything Works!" from the preverbal light bulb to the 102" whip on 75 meters. If you can tune it you can use it. But the real question is "how well does it work?" In the case of the light bulb and the 102" whip on 75 meters, not very well. The problem with

most anecdotal claims of antenna performance are the people making those claims of grandiose performance don't always know what they are missing. For example I know of a ham in our club that had been using a low hanging 40 meter inverted vee for years, a pretty marginal antenna at best. He added a properly deployed vertical antenna to his installation and was now hearing countries that he had never heard before. He was amazed at the difference. So whenever you hear someone make one of these claims understand that they may not be aware of what they are missing and think that making a contact into Washington, Texas, or Florida is a big deal, when the ham just down the street with his end fed wire is working Chile, Australia, New Zealand and Japan and receiving 59 signal reports.

At the risk of over stating the point let me offer another consideration regarding anecdotal performance. After spending several hundred and sometimes thousands of dollars on an antenna or spending several hard days of effort building or deploying an antenna system do you think the user will be in a position to give an unbiased appraisal of an antenna's performance? In my own case the answer is no. Every antenna is pretty darn good at first. But after a time when reality starts to set in and the money spent or the effort expended becomes old news one often starts to get a better sense of the reality of his or her antenna. Thus the never ending quest for the better antenna. So always be suspicious of the anecdotal claim of antenna performance.

## The Properly Deployed G5RV

Let me begin by saying the G5RV is a good antenna when deployed properly. But of all the antenna's to choose from it is perhaps one of the worst choices if you can't deploy it properly, and it should never be considered for attic installations. What is true for the G5RV is also true for the G5RV's variants. What is a properly deployed G5RV?

The biggest challenge with the G5RV is the feedline. Coax was invented because of the shortcomings of twin lead in that it is affected by any metallic objects that come near it. This is why the military adopted coax for use in World War Two.

Twin lead likes to couple with things like nails, HVAC ducting, electrical lines, conduit, metal rain gutters and siding. All of this metal interacts with the feedline causing imbalances in the system which results in detuning the antenna and inducing common mode currents. In addition, you should never coil the feed line or let it come in contact with the ground. Additionally the feedline should run perpendicular to the horizontal elements and in most attic installations this is not possible, instead the feedline wanders away from the antenna and down to the radio room. The other commonality with the G5RV that I see, especially in the case of the attic G5RV, it is often deployed with no balun or choke, which only make the RFI problem worse.

In the case of the G5RV the feedline is designed to be a part of the antenna system. So the feedline will do two things. On transmit it will introduce RF into any metal object in the vicinity of the feedline and if that metal object is an electrical line that feeds the TV room or the sewing room it can create what I call the poltergeist effect. The TV mysteriously turns on, the washing machine develops a mind of its own, the computer reboots, and so on. On receive the feedline will act like an antenna, because that's exactly what it is. Unlike coax the feedline in the G5RV is also a part of the antenna and it's designed to pick up and radiate RF. That feedline wandering through the attic is actually an antenna picking up all the stray RF your household electronics may be producing. It can be picking up RF from things like the motors found in washing machines, freezers and refrigerators. That feedline may also be picking up RF from devices like LED light bulbs and USB chargers and so on.

I've often asked those who have put G5RV's in their attic why? There are usually three answers. The first is usually, "because so and so said he has one" or "so and so recommended it." The other reason often given is, "because it's a good multi-band antenna." Hopefully you see why I mentioned the fallacy of multi-band argument earlier as well as the argument regarding anecdotal performance claims. The third answer often given is usually a combination of all of the above.

Let me state for the record, the G5RV is perhaps not the best choice one could make for an attic antenna due largely to issues with the feedline. If you want to reduce the problem with the G5RV then replace the twin lead with coaxial cable. But then you no longer have a G5RV but a good old dipole. Later in this article I will make some recommendations that you might consider that I think would be equal to the G5RV in terms of performance but without all the shortcomings of the feedline. Although I do have to say that any attic based antenna is going to be extremely compromised and susceptible to noise and can cause poltergeist like behavior with some electrical appliances, it's just the nature of the beast as they say.

Now let's consider the elements that constitute a properly deployed G5RV.

1. The feedline needs to run perpendicular from the horizontal portion of the antenna. It can be sloped or hang straight down from the center of the antenna.
2. The center support mast should NOT be made of metal. Fiberglass poles or PVC makes for a good center support for the antenna.
3. The antenna should be high enough that the feed line does not come within two feet of the ground. At the very minimum it should not touch the ground. For the standard G5RV that's at least 35', for the ZS6BKW that's 45'.
4. Ideally the antenna should be deployed in what we call a flat top configuration but can be deployed as in inverted vee, however there will be some loss of gain and the resonate frequency will go down some.
5. At the connection point between the coaxial cable and the twin lead a 1:1 current balun or choke should be inserted. The key here is controlling and minimize common mode current that so often occurs in the G5RV.
6. Use an antenna tuner to ensure the radio sees a 50 ohm load.

A G5RV that has been deployed using the recommendations above makes for a good multi-band antenna and is one I would be comfortable recommending. If one can't follow these six rules then I would recommend consideration be given to a different solution.

## Alternatives to the G5RV in the Attic

Now let's talk about the attic antenna. There no question that the ham limited to an attic installation is at a real disadvantage, but all is not lost. People often think I'm a big proponent of the vertical antenna, and they would be wrong. I am a proponent of using the best antenna as dictated by the constraints of the situation. The vertical is not always the best choice, nor is the horizontal wire antenna always the best choice. Let your given set of constraints determine what the best choice is for you. This is a common theme with me and one I'm sure you have all heard me state time and time again.

The other necessity when it comes to attic based antennas is to understand that due to size limitations you may not be able to operate on all the bands. So you need to set realistic expectations especially when attic space is limited. Exploit what you have and don't pine over what you don't have.

**Option 1, the common dipole:** Perhaps one of the best choices would be a standard dipole which can be made to be multi-band when connected to good antenna tuner. To extend its frequency range traps may also be added if one has the attic space. As with most dipoles a balun is important, especially in an attic installation. It will help to overcome the inherent imbalance of an attic antenna and help to reduce common mode currents. For the dipole use a 1:1 current balun at the feed point and preferably one that also can provide some choking to minimize common mode currents.

**Option 2, the OCF dipole:** The OCF has been shown to also be a good multi-band antenna. By using a 4:1 balun one can usually get a good match. Here again you should use a balun that provides some choking capability or add a choke if common mode currents continue to be a problem.

**Option 3, the loop:** The loop might be another option. Although often not as multi-banded as the OCF, for a given situation it might be a good option. Here again a 2:1 balun and choke should be used.

**Option 4, the vertical:** I know one ham who uses an attic based antenna on 10 meters and has good results with it. In his case (Larry AD7GL) uses an MP-1. See: Amazon.com: Super Antenna MP1C All Band HF VHF Ham Radio Portable MP1 : Electronics One could also build a vertical for 10 meters given the antenna is only about 102" tall and the radials would be equally as long. And you could get by with two to four radials. But you would be limited to 10 meters, although you might find that with a good antenna tuner the DIY vertical might also be usable on 12 and 15 meters.

**Option 5, the end fed wire:** This is perhaps the last option I would consider unless you have access to a good ground such as the electrical stand pipe. This antenna requires a 9:1 unun and a choke to control common mode current. You will want to keep the ground wire as short as possible, that is why I recommend you only consider this option if you have access to the electrical stand pipe for your electrical service.

**Feedline for the attic antenna:** For the feedline use a top quality RG-8 type coaxial. The reason for this is not because of line loss, the reason is for noise reduction. The better coax will help minimize the noise, something like RG-8x or RG-58 will be more susceptible to electrical noise. Electrically the attic can be a pretty noisy place so you should take advantage of the extra shielding that is inherent in the better quality coax like UltraFlex 10 or DXE-400 MAX. For most attic installations the feedline will be short, so cost should not be a factor and the benefit I believe would outweigh the cost of a top quality feedline.

## Conclusion

I hope I have helped to demystify the G5RV and to provide specific reasons why the G5RV is not a good antenna for attic installations. The G5RV is a good system under the right conditions, but the attic is not one of them. I would also like to note that of all the G5RV antenna systems or ones based on the G5RV theory, the ZS6BKW antenna system comes the closest to achieving the goal that is part of the G5RV mythology: a multi-band HF antenna consisting of a dipole like configuration with a simple matching system to cover as many of the amateur HF bands as possible. From 80 to 10 meters, the ZS6BKW provides an acceptable match on a majority of the HF ham bands and provides a low enough SWR to be within range of most antenna tuners.

If you've a mind to build a G5RV antenna they are very easy to build and are not expensive. Other than the twin lead everything you need to build one can be had at the local big box store. The exception being the balun or choke, that you can buy commercially or you can build one for around \$25.

If you would like to see an example of a homebrew G5RV let me know. I built one for the club that we used at last year's Field Day and I think all who used it were pleased with its performance. For comparison we also used a Hustler 4 BTV with a proper radial system and the performance of the G5RV was on par with the vertical.

73,

Gene

(WB7RLX)

## For more information see:

- *"The G5RV Antenna System – An Analysis"* by Rick Hiller – W5RH Slide 1 (bvarc.org)
- *"The G5RV Antenna System Re-Visited"* by L.B. Cebik W4RNL The G5RV Antenna System Re-Visited (nonstopsystems.com)
- *"The Truth about the G5RV Antenna"* by Mike Waters – W0BTU The Truth about the G5RV Antenna (dxzone.com)
- *"G5RV Multiband Ham Radio Antenna"* G5RV Multiband HF Antenna » Electronics Notes (electronics-notes.com)
- *"G5RV Antenna"* by G3TXQ G5RV Antenna (karinya.net)
- *"The G5RV Antenna - Can We Do Better?"* by G3TXQ The G5RV Antenna - Can We Do Better? by G3TXQ (hamuniverse.com)
- *"ZS6BKW vs G5RV"* by Larry James LeBlanc Slide 1 (w5ddl.org)
- *"The Real Truth About the G5RV Antenna"* Top Band Hams - THE TRUTH ABOUT THE G5RV ANTENNA
- *"The ZS6BKW Multiband HF Antenna Revisited"* by Martyn Vincent G3UKW sprat\_zs6bkw.pdf (ab4oj.com)
- *"History of Coaxial Cable"* Microsoft Word - History of coaxial cable.doc (silvercometars.com)
- *"Open Lines: A Short History of Coaxial Cable"* [http://www.arrl.org/files/file/Technology/pdf/QST\\_Aug\\_2001\\_p62-64.pdf](http://www.arrl.org/files/file/Technology/pdf/QST_Aug_2001_p62-64.pdf)





## Data on Number of Radio Amateurs Worldwide Needs Updating

10/04/2021

The oft-cited figure of 3 million radio amateurs worldwide may need updating. That number was what the International Amateur Radio Union ([IARU](#)) **published** in 2000 for the global head count. The IARU once regularly collected amateur radio population statistics, but stopped the practice around the point when the worldwide amateur radio population began to decline.

Data available elsewhere for a few major countries shows a steady decline in radio amateurs since 2000, with the exception of the US, where ham licenses — not necessarily licensees — number some 780,000 to date in 2021. Japan's ham radio population has dropped by more than 600,000 over the past 2 decades; as of 2015, it was 435,581, according to JARL. China boasts more than 174,000 radio amateurs as of 2021. According to 2018 statistics, Thailand has 101,763 hams; the UK has 75,660, and Canada has 70,198.

But, the specific size of the worldwide amateur radio population remains open to speculation, although a 2021 figure of 1.75 million may be closer to the truth.

— *Thanks to Southgate Amateur Radio News, other sources*



## August 2021 Volunteer Monitor Program Report

09/09/2021

The Volunteer Monitor (**VM**) Program is a joint initiative between ARRL and the Federal Communications Commission (FCC) to enhance compliance in the Amateur Radio Service. This is the VM Program Report for August 2021.

- Licensees in Pawcatuck, Connecticut; Wamego, Kansas; Valley Cottage, New York; Long Valley, New Jersey; Columbia, South Carolina, and Maryville, Tennessee, were sent Advisory Notices concerning operation on frequencies that were set aside for Haiti earthquake emergency communications by the International Amateur Radio Union (IARU) Region 2 Emergency Coordinator.
- 
- Licensees in Prineville, Winston, Silver Lake, and Roseburg, Oregon; Sioux Falls, South Dakota, and Houston, Texas, were sent Advisory Notices concerning failure to identify, as required by Section 97.119(a) of the FCC Amateur Radio Service, pursuant to a nationwide rule compliance review of operations on 3.819 MHz and 3.953 MHz.
- 
- A former licensee in Seabrook, Texas, was sent an Advisory Notice concerning operation with an expired license.
- 
- An FT8 operator in Orion, Michigan, was sent to an Advisory Notice reminding him of the 200 W power limit on 30 meters.
- 
- A licensee in New Caney, Texas, was sent a final notice that his case was being referred to the FCC for license revocation or deletion of voice privileges from his license.
- 
- A Good Operator commendation was sent to an operator in Roseville, California, for Exemplary Amateur Procedure on May 21, 2021, during the 40-meter California Rescue Communications Net.
- 
- 

The revised total for VM monitoring in July was 5,746 hours — the highest number of hours monitored since the inception of the VM Program.

The IT staff at ARRL Headquarters completed work on an automated system for Volunteer Monitors to report monthly monitoring hours and Incident Reports. — *Thanks to Riley Hollingsworth, K4ZDH, Volunteer Monitor Program Administrator*

# O'bay Swap

(repeat)

**SWAP ITEM #**

**FOR SALE:**

**and**

**WANTED:**

**Swap Items—Advertise here!**

**To view classified items ...**

**click link from the club website homepage.**

**NEW ITEMS**

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

**CLUB REFERENCE MATERIAL**

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

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

THANK YOU FOR YOUR SUPPORT

## Join OARC

### Join or Renew your membership now!

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

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

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

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

## Club Badges

OARC Club badges are available for all licensed club members.

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



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

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

## OARC Facebook Page



**Did you know that OARC has a Facebook page ?**

**Just click on the icon on the bottom of the club website home page to visit OARC's ongoing monthly activities and events. They are posted here for your viewing pleasure.**



## OARC You Tube Channel



### **Did you know that OARC has a You Tube Channel ?**

**A lot of our meeting presentations are recorded and posted to our OARC You Tube channel for you to view at a later date.**

**It's easy to view missed**



**meetings...**

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

## ANNOUNCEMENTS

### Next Club Meeting:

**3<sup>rd</sup> Saturday of each Month**

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

### Meeting/Activity:

**See monthly notices earlier in this newsletter.**

Talk-in: - 448.600 (pl 123.0)

Check OARC web site for details

**[www.ogdenarc.org](http://www.ogdenarc.org)**

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

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

### Next Weber Co VE Test Session:

**1st Wednesday Feb, Jun & Oct**

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

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

**Location: Permanent location**

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

**Contact: VE Liaison:**

**Rick Morrison W7RIK** (Co-Liaison)

**[morrisonri@msn.com](mailto:morrisonri@msn.com)** (801-791-9364)

**Gil Leonard N7GIL** (Co-Liaison)

**Jason Miles KE7IET** (IT)

**Cost: \$ 14.00**

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

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

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

# Club Web Site

Be sure to visit our club web site.

[www.OgdenARC.org](http://www.OgdenARC.org)

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

# Club Call Sign

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

**W7SU**

# OARC is 100 years old

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

<b>OARC REPEATERS</b>			
(*) Yaesu Fusion digital/FM compatible			
<b>FREQ</b>	<b>CLUB</b>	<b>TONE</b>	<b>LOCATION</b>
<b>146.900-</b>	<b>OARC (*)</b>	<b>125 DCS</b>	<b>Mt Ogden (w/WiresX)</b>
<b>448.600-</b>	<b>OARC (*) "talk-in"</b>	<b>123.0</b>	<b>Mt Ogden</b>
<b>146.820-</b>	<b>OARC (*)</b>	<b>123.0</b>	<b>Little Mtn</b>
<b>448.575-</b>	<b>OARC</b>	<b>100.0</b>	<b>Little Mtn (w/auto patch)</b>

FREQ/Offset	TONE	LOCATION	OWNER
145.250 -	PL 123.0	Weber State Univ	WSC
145.290 -	PL 123.0	Brigham City	GSARC
145.330 -	PL 100	BYU (Provo)	BYUarc
145.430 -	PL 123.0	Brigham City	GSARC
145.470 -	PL 123	Powder Mountain	Weber Co Sheriff
145.490 -	PL 123.0	Promontory Point	unknown
146.620 -	PL none	Farnsworth Peak	UARC
146.640 -	PL none	Logan	BARC
146.720 -	PL 103.5	Mount Logan	BARC
146.760 -	PL none	Lake Mountain	UARC
146.780 -	PL 100.0	Lake Mountain	UVARC
146.920 -	PL 123.0	Promontory Point	N7TOP
147.040 +	PL 123.0	Antelope Island	DCARC
147.100 +	PL 123.0	Morgan County	KB7ZCL
147.120 +	PL 100.0	Farnsworth Peak	UARC
147.220 +	PL 123.0	Brigham City	GSARC
147.260 +	PL 103.5	Promontory Point	BARC
147.360 +	PL 100.0	Lewis Peak	Summit Co ARC
447.200 -	PL 127.3	Antelope Island	DCARC
447.225 -	PL 100.0	Malad Idaho	Malad Repeater
447.775 -	PL 123	Powder Mountain	Weber Co Sheriff
448.300 -	PL 123.0	Brigham City	GSARC
448.825 -	PL 123.0	Clearfield City	IRLP Node 4654
449.100 -	PL 146.2	Farnsworth Peak	UARC
449.250-	PL 123.0	Weber State Univ	Coming soon
449.425 -	PL 100.0	Nelson Peak	IRLP - Western Refl
449.500 -	PL 100.0	Farnsworth Peak	UARC
449.625 -	PL 103.5	Mount Logan	BARC
449.775 -	PL 123.0	Promontory Point	unknown
449.925 -	PL 100.0	North Salt Lake	DCARC
449.950 -	PL 123.0	Clearfield City	IRLP Node 3876
ATV - wb7fid	TV Ch 58	Farnsworth Peak	UARC - Utah ATV

## AREA CLUB MEETINGS & WEB SITES

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

## LOCAL AREA NETS

DATE	CLUB	FREQ
Daily @ 12:30 PM mt	Utah Beehive net HF	7.272 Mhz <b>HF LSB</b>
Daily @ 07:30 PM mt	Utah Code net HF	3.570 Mhz <b>HF CW</b>
Daily @ 02:00 UTC	Utah Farm net HF	3.937 Mhz <b>HF LSB</b>
Sunday @ 8:45 AM	Ogden Old Timers HF net	7.193 Mhz <b>HF LSB</b>
Sunday @ 7:15 PM	Weber/Davis ERC	146.820 - 123.0 (ERC training net)
Sunday @ 7:30 PM	GS ARC	145.430 - 123.0 (training net)
Sunday @ 8:30 PM	SATERN Net	145.900 - 123.0
Sunday @ 9:00 PM	Morgan Co Net	147.100 +123.0
Sunday @ 9:00 PM	UARC Info net	146.620- no PL tone required
Monday @ 9:00 PM	2-meter SSB net	144.250 Mhz <b>2-meter USB</b>
<b>Tuesday @ 6:30 PM</b>	<b>OARC—Ham &amp; Eggs Net</b>	<b>448.600 -123.0</b>
<b>Tuesday @ 8:00 PM</b>	<b>Weber ARES</b>	<b>448.600 - 123.0</b>
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 <b>HF USB</b>
Wednesday @ 9:00 PM	6-meter SSB net	50.125 Mhz <b>6-meter USB</b>
<b>Thursday @ 7:00 PM</b>	<b>OARC - 10 Meter Net</b>	<b>28.385 MHz USB (all hams invited)</b>
Thursday @ 6:30 PM	Davis Co Elmers Net	147.040 + 123.0 <b>New Hams</b>
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 <sup>rd</sup> 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 <b>HF LSB</b> 3 <sup>rd</sup> Saturday – odd months only
Saturday @ 11:00AM mst	QCWA net HF	7.272 Mhz <b>HF LSB</b>

# 73 de W7SU

**w7su@arrl.net**

[www.OgdenArc.org](http://www.OgdenArc.org)