

SECOND EDITION

This is the second edition of the OVARC email newsletter. It is sponsored by the Oro Valley Amateur Radio Club <http://www.tucsonhamradio.com>

NEW CLUB MEETING LOCATION

Ascension Lutheran Church

1220 W Magee Rd

Tucson, AZ 85704 (near LaCanada and Magee)

Next meeting Friday April 18th

CONGRATULATIONS TO THE NEW OFFICERS AND BOARD MEMBERS for 2014

President	Bob Molzcan	KA7VPR
Vice-president	Ron Herring	W7HD
Secretary	Howard Chorost	KC7AC
Treasurer	David Beauchesne	AK2L
Board Members	David Branson	KCOLL
	Scott Boone	K7ADX
	Dave Coccio	N7AKC
	Gary Schmitz	KT7AZ

Sunday Night Net 19:00 MST OVARC Repeater System

Join the group every Sunday night at 19:00 MST (7:00PM) on the OVARC repeater system for the Sunday Night Net. Two Sundays per month are a Tech Net where we discuss ham radio technical topics. On the Sunday after our general membership meeting we have our Radio Tradio where you can list ham radio items for sale. The other night is a general discussion. Everyone is welcome on the net regardless of club affiliation.

We are always looking for Net Control Stations so if you would like to try your hand at being NCS, contact Lanny, KF7LV our Net Manager.

The Oro Valley Amateur Radio Club currently has four wide area repeaters. All of our repeaters are normally linked via VOIP over internet connections.

All of our repeaters are open to ANY licensed ham. We invite you to use these repeaters as often as you like.

2 Meters

146.620(-) PL 156.7 - Callsign WØHF

Located on Keystone Peak (Map: <http://g.co/maps/5tdjq>)

Antenna Height: 100+ Feet
 Elevation: at nearly 7,000 feet
 Power Output: 100 Watts
 Antenna: Decibel DB-224
 Feedline: 7/8" Hard Line
 Repeater: Kenwood TKR-720

145.190(-) PL 156.7 - Callsign WØHF

Located on the Oro Valley Police substation tower at Oracle Rd at Mcgee Ave, Tucson, Arizona

Antenna Height: 57 Feet
 Elevation: 2584 Feet
 Power Output: 100 Watts
 Antenna: Tram 1491
 Feedline: LMR-400
 Repeater: Kenwood TKR-720

Echolink: Node: 99946
Auto Patch Instructions:
PLACE CALL: ID, Push 1+Area Code (even for a local call)+Number.
HANG UP: Press 2, Then, ID and Clear.
You are welcome to place long distance calls as we are not charged for long distance.

70cm

444.100(+) PL 156.7 - Callsign WØHF (MOVED to OVPD Main at Tangerine and LaCanada)

WIDE Northwest coverage and additional Tucson Coverage (including Sahuarita)

Antenna Height: Feet (adi)
Power Output: 50 Watts
Antenna: JetStream JTB3
Feedline: LMR-400
Repeater: Kenwood TKR-820

440.400(+) PL 156.7 - Callsign WØHF

Located on the Golder Ranch Fire District tower on Golder Ranch Road in Catalina, Arizona.

Antenna Height: 67 Feet
Elevation: 3081 Feet
Power Output: 50 Watts
Antenna: Diamond X-30
Feedline: Andrews 1/2" Hard Line
Repeater: Kenwood TKR-820

Public Service Opportunities

There are many opportunities to provide public service in Southern Arizona. Specific requests for help will be communicated via email. If you would like to volunteer for any of these events contact public_service@tucsonhamradio.com

Handyman Corner

A new feature of OVARC monthly meetings is the Handyman Corner. These short presentations will show how to accomplish small projects around the shack. The first Handyman Corner presentation will show how to install a PL-259 connector. Although these sessions are targeted to our newer hams, they may provide some new ideas for the more experienced hams to accomplish these tasks.

OTHER NEWS

It is official! The first OVARC club meeting of 2014 was held at our new location, the Ascension Lutheran church. The church is located at the intersection of Magee & LaCanada roads, and details may be found on the OVARC web site. A stellar presentation was given by Scott K7ADX on the basics of DSTAR. If you have ever wanted to know more about this relatively new mode of digital amateur radio communications, the January OVARC club meeting was the place to be. The meeting time is still 7:00 PM Arizona time, so don't be late!

LINKS TO VIDEOS AND OTHER ARTICLES

The EEVblog did a tour of the TV transmission facility in Sydney, Australia and had the tech pull apart one of the decommissioned valve based transmitters.

Video here: http://youtu.be/mR_wJkxKSXU

Russ, KG7DYX

ZS6BKW Six Band Antenna - similar to G5RV

Bill Orr W6SAI mentioned this modification to the G5RV dimensions in an article published many years ago. I have used it for field day and portable operation for several years. I use three camouflage pole supports to get the antenna up twenty feet. The antenna is suitable for use without a tuner for the 40, 20, 17, 12, 10 and 6 meter bands.

Two people can easily erect this antenna by first staking two guys for one end support and then erecting the pole and using the antenna as the third guy. Likewise, the center support can be erected and two guys used to support the first half of the antenna. The third pole supports the other end of the antenna and two guys are required for that pole. A fence post or other support can be used by lashing the support pole to the post instead of using the guys. Try not to erect the antenna directly above a chain link fence.

Dimensions: 94 ft(28.65M) - 2x47 ft(14.32M) #14 electric fence wire.
 40 ft(12.19M) 450 Ohm Ladder Line. Antenna up 20 ft(6.1M).
 DX Engineering 1:1 Current Balun at ladder line junction with coax.
 100 ft(30.48M) RG-8X to rig (this length not critical, any length will work).

Note: Frequency in [mHz], SWR in (ratio), Imp Ohms

Low End	SWR	Lowest	SWR	Imp	High End	SWR	Bandwidth
[06.710]	(2:1)	[06.920]	(1.09:1)	46	[07.130]	(2:1)	[0.420]
[13.775]	(2:1)	[14.120]	(1.16:1)	39	[14.465]	(2:1)	[0.690]
[17.405]	(2:1)	[17.840]	(1.20:1)	48	[18.275]	(2:1)	[0.870]
[24.460]	(2:1)	[24.840]	(1.23:1)	60	[25.220]	(2:1)	[0.760]
[28.085]	(2:1)	[28.650]	(1.14:1)	48	[29.215]	(2:1)	[1.130]
[49.520]	(2:1)	[50.240]	(1.25:1)	44	[50.960]	(2:1)	[1.440]

Low	SWR	Imp	High	SWR	Imp
[07.000]	(1.29:1)	64	[07.300]	(3.01:1)	62
[14.000]	(1.30:1)	41	[14.350]	(1.69:1)	27
[18.000]	(1.40:1)	44	[18.250]	(1.96:1)	58
[24.850]	(1.22:1)	60	[24.950]	(1.36:1)	67
[28.000]	(2.26:1)	72	[29.000]	(1.65:1)	43
			[29.600]	(2.49:1)	17
[50.000]	(1.41:1)	42	[51.000]	(2.14:1)	21

Readings taken with an MINI60 HF Antenna Analyzer

I Use lugs and brass screws to join the ladder line to the aluminum wire. A one inch PVC Tee with holes for the screws coupled to a short piece of one inch pipe serves as the center insulator and joins the wire to the ladder line. Tape the ladder line to the short PVC pipe and insert into the support pole. Route the ladder line away

from the support pole. The four foot sections of fiberglass or aluminum camouflage poles are available on eBay or at hamfests.

These dimensions are optimized for CW/Digital frequencies. A slightly shorter ladder line would allow better SWR in the phone portions of the band. Erect the antenna in it's final position and trim the ladder line using an antenna analyzer to the desired frequency on 20M. The other bands will follow the 20M trim.

I have used this antenna on the low end of 80 meters using an antenna tuner, but the SWR rises sharply toward the 75 meter end of the band.

Jim W5ZIT Dec 2013

FOR SALE

Had to make space for a 40 meter beam, so I'm selling a Cushcraft A-3WS 3 element beam for 12 and 17 meters. Works great. Assembled but on the ground. Needs a couple plastic end caps on the traps but otherwise is in perfect shape. New price \$500. Haul it away for \$100. Tom Kravec, W8TK. Phone 520-572-0554.

Looking for a larger generator? Powermate 5500 watt generator, includes wheeled carrier frame, 5 gal gas can, and RV 30A 3-prong plug adaptor to the built-in 50A 4 prong adaptor. Gets about 11-12 hours run-time on 5 gals gas. In good working condition with about 70 hours on the Subaru engine. Asking price is \$250 if you pick it up or \$350 delivered in the Tucson metro area. Call Ron W7HD at 240-5322 or email me at ronh@w7hd.net. I upgraded to a Honda (much quieter).

2014 Hamfest

KF7SYU suggested to Bob that we reserve November 8 for the Hamfest date, reserve the school venue, and start publicizing early. Also we should try to see if we can get the ok for overnight parking, and perhaps hire a security guard to watch the property for overnight parkers.

This has been confirmed for Nov 8th.

A word of advice to new hams buying new gear – get the programming software and cable right away! My son Sean KG7JLQ just went through that when he purchased his brand new FT-857D after passing his general exam. His comment after trying to program it manually - "Dear God" which prompted him to do an internet search for a better guide to programming the radio than the Yaesu manual (which is confusing at best). I sent him a G5RV and auto-tuner as a "new-ham" present from Mom & Dad, which should arrive sometime before Easter sunday. He'll have to deal with the mobile antenna for his Subaru, but at least the same tuner will work. He has a mobile antenna for 10-6-2-440 already, so at least that part is taken care of for now.

When buying a serial-to-usb converter be sure to get one that uses the FTDI chip if you are running Windows 7 or later instead of the PL2303 that is more common. It will save you a lot of headaches trying to find a driver for it that will work. Android apps for amateur radio (Browse app store for "ham radio")

ANDROID HAM APPS

I just tested these on my new Samsung Galaxy Note 3. There are MANY more out there, but these are handy.

- 1 – ARRL Repeater Directory
 - 2 – Ham Radio Tools
 - 3 – Echolink
 - 4 – Ham Radio Ionosphere Status (what is the sun doing?)
 - 5 – QTH Locator Widget (shows your current maidenhead location)
 - 6 – Morse decoder
 - 7 – ARRL QST
 - 8 – APRS Messenger
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Android apps tips and tricks

Q. Is there any way to see actual WiFi activity?

I like to know which app at this moment downloads or sends data without my doing.

A. Playstore -> OS Monitor

Amongst others, it shows you all current connections including their status, always along with the target IP and the app holding it. This might at least help you to narrow down possible candidates.

Q. My Nexus 10 (Android 4.4.2, unrooted) is not playing nice with my wireless network. Although it can connect and I don't have any problems browsing the web, for some reason Android thinks that it doesn't have an internet connection.

A. When the data indicator is orange (on Kit kat ; grey on older versions), this means that the device is unable to receive a response from GCM (Google Cloud Messaging, the framework that handles push notifications). This traffic is sent through ports 5228, 5229, and 5230. If the AP is blocking or interfering with traffic on those ports, push notifications won't work and the data indicator will be orange. Manual refreshes and other Internet traffic will still work fine if the ports used for those transmissions (80, 443, etc.) are not blocked.

Q. I only get 1.5GB data per month on my mobile and don't want it to download my Spotify playlists, update apps etc whilst using my phones WiFi.

A. If you go to Settings > Data usage and open the menu, then select

Mobile hotspots you can select Wi-Fi networks that should be treated as mobile hotspots. This should restrict the data usage when connected to these networks.

- Q. I'm trying to connect to my home's wireless router with my new LG G2 (running version 4.2.2) and it keeps saying "Obtaining IP address..." for three minutes, then momentarily saying "Saved, secured", before cycling through all over again. It does this about 5 times and then eventually stops trying and says "Avoided poor Internet connection".
- A. Goto Settings --> Wifi-->(press menu) Advanced--> uncheck "Avoid Poor Connections" checkbox. Then Click on network Available. Now it will connect(or else click forget and re-enter your password).
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Windows 7 Tips & Tricks <http://windows7tips.com>

Understanding and Making Better Use of the Internet <http://vlaurie.com/computers2/internet.htm>

Useful Downloads and Slide Shows <http://vlaurie.com/computers2/downloads.htm>

for Windows and computers in general

The Elder Geek (fantastic site) <http://www.theeldergeek.com/>

Operating Systems Technical Information and Forum

Don't forget to plan for Field Day 2014 on the weekend of June 28-29. There will be sign-up sheets at the club meeting this Friday April 20th. Tom W8TK has the planning well organized already and it looks like conditions will be good (so far).

Enjoy,

Ron Herring W7HD