

**THIRD EDITION**

This OVARC email newsletter 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)*

**THANKS TO THE 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

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## Public Service Opportunites

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](mailto:public_service@tucsonhamradio.com)

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## 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. Although these sessions are targeted to our newer hams, they may provide some new ideas for the more experienced hams to accomplish these tasks.

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### OTHER NEWS

The March meeting featured a very nice presentation about APRS by Bob AF9W. Highly informative, it featured a lot of how-to-do-it and what various parts of APRS were for.

Then, in April, a very interesting guide to a variety of topics centered around radio telescopes and how to measure the upsets in the atmospheric layers due to sunspots, with an added plus on how to communicate during radio blackouts due to solar flares. On April 25<sup>th</sup>, we had an X1.3 solar flare that did cause radio blackouts over the eastern Pacific. Communications, Planetary Geomagnetism, and the Sun was presented by Keith Morin.

The April evening presentation had three parts. The first was to take you inside the solar observatory on a picture tour. The second was to introduce you to a new tool in Radio Communications that you will benefit from in the very near future. The presentation ended with an inside

tour of a new CERT Mobile Emergency Operations Center (MEOC) that is currently being developed that will be the first to benefit from this research.! Keith Morin is the founder of Seismatech located in Oro Valley. This advanced Research and Development company is involved in several new projects related to Earth Sciences and Emergency Response Systems. The new company website is: <http://www.seismatech.com> .

## -----FOR SALE-----

When you sell an item or change the status, please let me know as soon as possible so I don't keep putting it in the newsletter. You can also specify how long you want your item to run in the newsletter at the beginning (for example, one time only).

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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.  
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Looking for a 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. Reduced asking price is \$200 if you pick it up or \$300 delivered in the Tucson metro area. Original cost was \$899. Call Ron W7HD at 240-5322 or email me at [ronh@w7hd.net](mailto:ronh@w7hd.net) . I upgraded to a Honda (much quieter). Now this one only gets used during monsoon season for those pesky power outages.  
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### 2014 Hamfest

This has been confirmed for Nov 8th. The plan is to do this the 2<sup>nd</sup> Saturday each November.  
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## TIPS & TRICKS

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Need to put up a temporary antenna and don't have any supports nearby? Pick up a 12-ft extendable pole at Walmart in the home improvement section. They only cost around \$31, and when combined with some 1/4" nylon rope (\$15 for 100ft) and 10" tent stakes (about \$0.50 ea) make a nice 12' mast for your antenna. For wire for the antenna, a roll of fence wire for about \$24 gives you a mile of 19ga galvanized wire. Or for \$70 you can get 1000 ft of heavy duty pet fence boundary wire. A couple of holes drilled in a piece of 1" plastic pipe a couple of inches long makes a good center insulator.

Linzer Products RP E 3412 **Extension Pole** 4-12-Foot Aluminum - Each \$30.97 at Walmart

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My son Sean (KG7JLQ) up in Portland Oregon was wondering how to get the SWR down on the 10M mobile antenna on his Subaru. He had to also consider the effects at 15M & 20M, since he has his general license and a Yaesu FT857. It's hard to add ground plane on a car, but there is a neat trick that allows you to

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simulate a better ground. It's called a "tiger tail" and consists of a piece of wire about 8-9' long connected to the ground side of the antenna mount, then run it inside the car and under the carpet. Connect the loose end to a chassis bolt or seat bolt to get a ground if you see it getting hot or arcing! You can also just run it underneath the car along the chassis tucking it under a hose or along a beam. Add another on the other side and you've doubled your ground! Again, if you see any arcing or heating, ground the loose end to the chassis (it's good idea to do this anyway). Even though it's not a quarter-wave on 15M or 20M, the ground effect is still enough to make the antenna look more like a match on those bands. This is just like adding a 19" piece of wire to the rubber duck on a handheld – you get a better ground effect and effectively create a dipole antenna.

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===== DSTAR STATUS REPORT =====

The Dstar project is coming right along. Before Field Day we had installed the gateway software on the Linux control computer and were waiting on the frequency pair coordination to proceed. THAT could be the big hold-up, since the repeater coordinators move S-L-O-W-L-Y. In all fairness, they have a lot to consider when assigning a pair, since they need to do terrain mapping and frequency interaction studies. When I had my 2M repeater out here in Avra Valley on the air (and just before I took it down), I was hearing a repeater on my frequency pair on Mingus mountain in NW Arizona! Fortunately, they were using PL tones, too, but it seemed weird to hear one that far away on a consistent daily basis.

Considering that NO (zero) club funds were used to finance the project, since all the funds came from volunteer contributions, this is pretty exciting. In fact, enough was left over from the contributions that those niggly gotcha type items that always crop up will be covered. It is expected that it will be fully operational by the end of July. Initially we plan on putting it at the Magee and Oracle location. Since RST is potentially putting up a Dstar repeater in Sahuarita (no idea of the go-live date there), this would mean really good coverage for Dstar users. Scott K7ADX and Bob KA7VPR put up their antennas and ran the cables to their rack. The rest is up to RST.

The OVARC Dstar system is temporarily installed at Magee and Oracle, with temporary antennas and running low power (5W). It's currently running on 445.800 output and 440.800 input (the inverted pair we hope to get permanently). When I left we were still waiting on the Trust server to do its approval on 21-Jun-2014 (which finally happened just before Field Day). I can remote into the server to do any Linux maintenance needed, so we're good there. -Ron W7HD-

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## Field Day 2014 Success

OVARC Field Day during the past weekend was a great success, with a final score of 6,510 points, eclipsing the 2013 score by almost 500 points (6,510 in 2014 vs 6,036 in 2013). In case you missed it, I'll recount some highlights:

CW contacts accounted for 68% of total QSO points, digital contacts 17%, and phone contacts 15%. Morse is alive and well!

Setup on Friday morning took 2 hours of antenna work: two 40 ft poles supporting inverted vee antennas

for 40 and 80 meters and a KT7AZ-designed-and-built 28 ft mast for the tribander. Outdoor work was finished before the big heat arrived.

Chuck, KB7OGE, again served as our greeter, welcoming all members and visitors attending. Chuck even signed up a visitor as a new club member.

Bob, KA7VPR, our club president, convinced WalMart management to donate \$50 for Field Day, supplying coffee, doughnuts, and bagels for the club. Bob also delivered a presentation and demonstration of DMR (Digital Mobile Radio). It's an interesting alternative to D-Star, and might make a good program for a regular OVARC meeting.

Bob, AF9W, managed to handle most of the paperwork, including press releases and website maintenance, from his remote location in the soggy northwest. He participated in FD with a group there but his heart was in Oro Valley.

Doug, W7AAA, spent hours putting together an information table. His poster was spectacular and detailed the importance of ham radio for emergency communication. Many visitors took home the printed info that Doug provided, including a flyer about OVARC.

Scott, K7ADX, volunteered to send the bonus message to ARRL SM for Arizona, even though he had never done any NTS work in the past. His hours of study and practice paid off, earning us another 100 bonus points.

Ron, W7HD, accomplished a satellite QSO after years of trying. There are about 2,500 groups participating in FD every year and most of them are trying to make that one contact during the few minutes a satellite is in range. Ron succeeded this year and everyone shared his excitement.

Chef Dave, N7AKC, again provided the high point of FD by preparing and serving a wonderful steak dinner. Every year Dave devotes hours to shopping, preparing, cooking, serving, and cleanup not only to feed the hungry group but provide a nice social gathering for hams and spouses.

Tom, W8TK, copied the ARRL FD CW bulletin for 100 point bonus.

Steve, N7AZT, once again served as official photographer. He was able to put together a slide show of antenna setup which played continuously at the info table and he provided me with photos for submission of logs to ARRL to document bonus point claims. And he will provide photos for the website so everyone can experience FD even if they could not participate.

Thanks to all who did participated. Next year's FD (June 27,28) will be even better.

Stay tuned.

Tom Kravec, W8TK

OVARC FD Chairman

tkravec@pobox.com

===== END NEWSLETTER =====

Enjoy,

Ron Herring W7HD