

**Oro Valley Amateur Radio Club**

A 501c3 club. The Oro Valley Amateur Radio Club is an Arizona Non-Profit Corporation.

Newsletter editor: Ron Herring W7HD



**Monthly club meeting location:  
Ascension Lutheran Church  
1220 W Magee Rd  
Tucson, AZ 85704 (east of LaCanada on Magee)**

**Meetings are held the third Friday of each month at 7:00 pm MST except in December (annual Christmas dinner). Elections are held in January.**

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**2016 OFFICERS AND BOARD MEMBERS**

Steven Wood W1SR	President	<a href="mailto:president@tucsonhamradio.org">president@tucsonhamradio.org</a>
Bob Molzcan KA7VPR	Vice-President	<a href="mailto:vicepresident@tucsonhamradio.org">vicepresident@tucsonhamradio.org</a>
Hanna Eckert KG7TPD	Treasurer	<a href="mailto:treasurer@tucsonhamradio.org">treasurer@tucsonhamradio.org</a>
Carl Foster KB7AZ	Secretary	<a href="mailto:secretary@tucsonhamradio.org">secretary@tucsonhamradio.org</a>

**ADDITIONAL BOARD MEMBERS**

Ross Eckert	Scott Boone K7ADX	Fred Bresani W2HZ
Bob Stephens AF9W	Gary AE7GP	



Find us on Facebook

[https://www.facebook.com/orovalleyarc?ref=tn\\_tnmn](https://www.facebook.com/orovalleyarc?ref=tn_tnmn)

Want to buy or sell something or chat about a topic with other club members?

Join the Tucson Ham Radio Yahoo Group. <https://groups.yahoo.com/neo/groups/tucsonhamradio/info>

Cross Reference is a new feature we introduced in the November 2016 newsletter. It enables you to quickly get to the article in which you are interested. Just click on the link to go to the reference. On each page there is a "Cross Reference" in the footer to instantly come back to the Cross Reference listing.

**SATURDAY BREAKFAST**

Village Inn 6251 North Oracle Rd  
Between Rudasil and Orange Grove Rd on N Oracle Rd  
Saturday Breakfast at Village Inn



[Return to Cross Reference](#)

**CROSS REFERENCE**

**THUMBNET AND NONGLES** Satellite monitoring for clubs and schools  
High-Quality Audio Network Performance over the Internet

CARE AND FEEDING OF LIPO BATTERIES

24HOP

DIY KX2 Battery Replacement

Contest Calendar

2017 Yuma Hamfest

Public Service Events

SATELLITE TRACKING

Remote Management of a Raspberry Pi

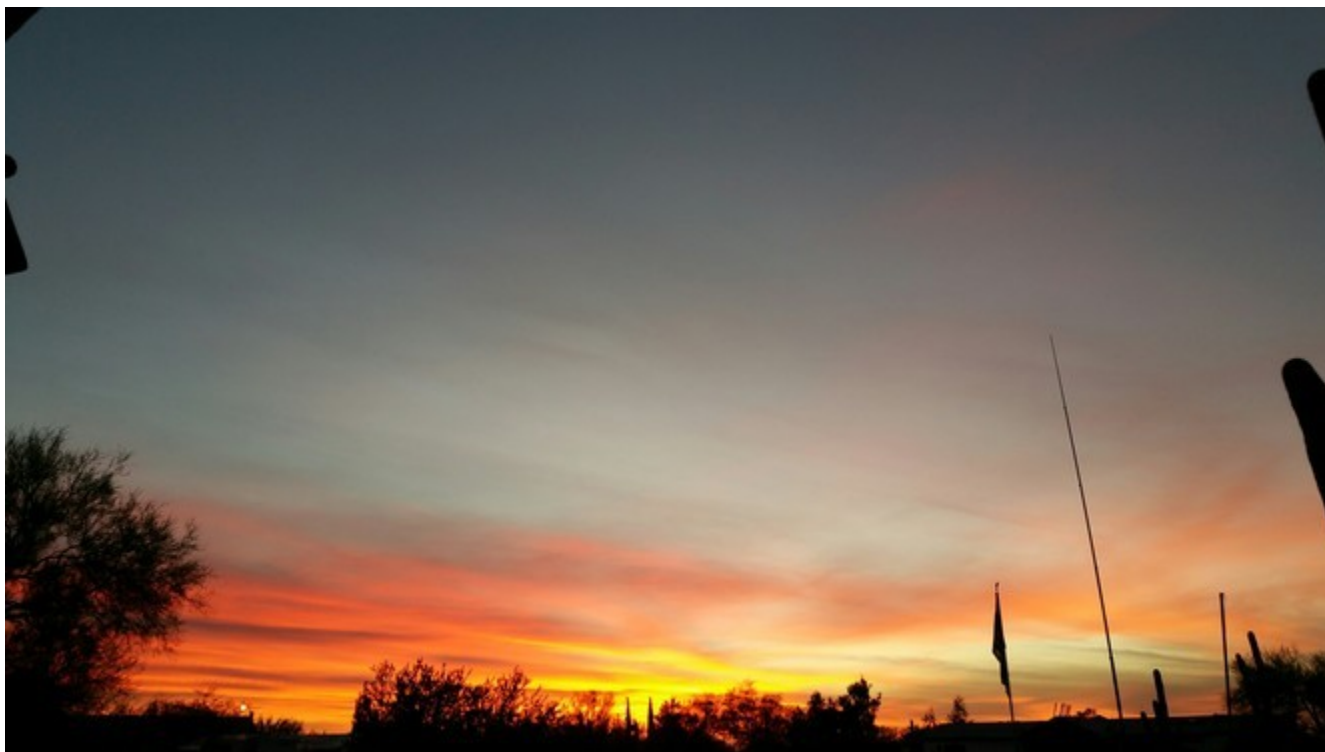
DID YOU KNOW?

Saturday Breakfast at Village Inn

Operating Above 50Mhz

NOTICE OF SUNDAY NIGHT NET CHANGE

FOR SALE LISTINGS



Sunset at my house on 09-Dec-2016

**NOTICE OF SUNDAY NIGHT NET CHANGE**

There will be no Sunday night net on Dec. 25<sup>th</sup> Christmas Day or on Jan 1<sup>st</sup> New Years Day.

This edition will be published early, since there won't be a regular club meeting.

Be sure to attend the January 20<sup>th</sup> club meeting, since we will be electing officers for the coming year. Steve Bell will be presenting his satellite setup.

Please note that my web site is now at <http://w7hd.ddns.net> instead of .info.

**Saturday Breakfast**



# Join us!

Saturday 7:30AM

[Where?](#)



## **Linux SIG**

2nd Saturday of the Month

9:00 AM

OVPD EOC

Click [here](#) for more details

## **Tucson Ham Radio**

**Yahoo Group**

Want to buy or sell something or chat about a topic with other club members? Join the [Tucson Ham Radio Yahoo Group](#).

This group was created for OVARC members and friends to chat online. Come see what it is all about.



To list items for sale in the OVARC Newsletter send your information to [forsale@tucsonhamradio.org](mailto:forsale@tucsonhamradio.org)

[2017 OVARC Board Elections](#)

**2017 OVARC Board Elections**

Elections for the OVARC Board of Directors will take place at the January 20, 2017 General Membership Meeting. Four seats are up for election - Steve Wood W1SR, Scott Boone K7ADX, Bob Stephens AF9W, and Bob Molczan KA7VPR. W1SR and K7ADX are running for re-election. Steve W1SR will be taking nominations via email at [board\\_nominations@tucsonhamradio.org](mailto:board_nominations@tucsonhamradio.org).

**December 2016 Club Meeting - "Holiday Party"**

**Sign Up for the Oro Valley Amateur Radio Club**

**2016 Holiday Party  
Potluck**

**Sunday**

**December 18, 2016**

**3:00PM - 5:30PM**

**Ascension Lutheran Church**

**1220 West Magee Road, Tucson, AZ**

Open to OVARC members and guests only.

Members may bring a guest.

Room for 96 so sign up early.

Everyone will need to RSVP.

**In addition to a dish to pass, each member and guest(s) should bring at least one non-perishable food item for the church food drive.**

[Click here to RSVP](#)

[Read more: December 2016 Club Meeting - "Holiday Party"](#)

**[January 2017 Club Meeting - "Operating Above 50 Mhz"](#)**

**Friday, January 20, 2017**

**7:00pm MST**

Ascension Lutheran Church 1220 West Magee Road, Tucson, AZ

**Handyman Corner**

Presented by Bob, AF9W

**"Getting Ready for Public Service Season"**

Board Meetings are held at 9:00am MST on the 1st Saturday of each month at the Oro Valley PD Emergency Operations Center  
 1920 E Tangerine Rd.  
 Oro Valley, AZ

**The VE testing follows at 10:30.**

The Linux SIG meets at the same location from 0900-1200 the second Saturday of each month, except November (Hamfest day).



Sunday 20:00 MST Weekly Ovarc net on Ovarc repeater system

**Wednesday 19:30 MST Weekly Slow CW Net 28.310 MHz****REPEATERS**

W7AI ANALOG - all have a PL of 156.7:

**2 METERS**

- 146.620- Keystone Peak
- 147.320+ Golder Ranch Fire District tower in Catalina, AZ

**70 CM**

- 444.100+ Oro Valley PD Main Station
- 447.525 - Marana PD Town Center

**D-STAR**

- |            |         |        |                                     |
|------------|---------|--------|-------------------------------------|
| • 445.800  | -5.0Mhz | W7AI   | Naranja & La Canada in Oro Valley   |
| • 445.1375 | -5.0Mhz | KG7PJV | Tucson Foothills                    |
| • 440.7625 | +5.0Mhz | KG7RWN | Camino Seco and 22 <sup>nd</sup> st |

**ECHOLINK Node W7AI-L 99946****24HOP**

**The 24 Hours of the Old Pueblo is a mountain bike race held every year around Valentine's Day in the desert near Willow Springs Ranch northwest of Oracle. This year the event is going to be held on February 18-19. The event is held on a 16-mile track in the desert and the goal is to ride as many laps as possible between the start at noon on Saturday and the stop at noon on Sunday. Ham radio operators are very important for this event as we literally save lives. For more information on this event go to <http://www.rstclub.org/24hop.html>. Sign-ups for working the event started 14-Dec-2016.**

Bob AF9W

## Operating Above 50Mhz

January 2017 Presentation

Presented by Steve Bell, KJ7OG

VHF, UHF and Microwave frequencies are easily used if you have the right antenna and the ability to assemble a small station. It's not difficult but it takes some commitment and a desire to operate on frequencies above the 50 Mhz (6 Meter) ham band.

Steve Bell, KJ7OG will be our featured speaker for the January meeting where he will talk about the world of VHF - UHF - Microwave operations. Steve will share his expertise in getting a station on the air and EME (Earth Moon Earth) operations. Recently Steve participated in an annual 10GHz terrestrial contest from Mount Lemmon.

With the HF bands becoming more quiet as a result of the sunspot cycle, VHF - UHF and EME operations might be good alternative places to operate.

### About Steve

Steve is a retired Electronics Engineer and a regular OVARC member. He was first licensed on 1993 as KB7TRZ. Steve was a key contributor on several University of Arizona MARS missions including the hugely successful MARS PathFinder camera.





Articles/Notes are needed for the February 2017 issue of Arizona Desert Aire Waves (the state-wide newsletter by ARCA). If you wish to subscribe to the ADAW newsletter send an email with your first and last name, callsign and desired email address requesting it. Please submit them to either

newsletter@tucsonhamradio.org -or- for articles or sign-up

[president@tucsonhamradio.org](mailto:president@tucsonhamradio.org) for articles only

no later than January 8th so I can get them to the ADAW editor.

Ron W7HD

<http://www.hornucopia.com/contestcal/weeklycont.php>

## **Contest Calendar for January 2017**

by Tom Kravec W8TK

Lots of activity in contests during winter because lousy weather in the frozen north drives folks indoors and to the hamshack. Band conditions are generally better as well, with less atmospheric noise on the HF bands.

January 7-8: ARRL RTTY Roundup. Operate <24 hours, work any station once per band. Exchange is RST+State/Province. DX stations send RST+serial number. Operating RTTY is easy nowadays due to computer software and sound cards. If you just want to listen (print) RTTY, no interface is required. Simply connect your radio audio output to computer sound card input. Recommended (by me) software includes MMTTY and fldigi. Google them for free download. If you wish to participate, you can build an interface for a couple bucks or buy one like a Signalink. As with other digital modes, listening is not necessary since signals are displayed on the computer screen waterfall. I have operated RTTY contests while watching football on TV. Details of contest: <http://www.arrl.org/rtty-roundup>

January 21-22: North America QSO Party SSB. Microphone users can operate up to 10 hours in this one, in which all stations are limited to 100 watts. Multipliers are available for working only for North America stations. Exchange: name+state/province for NA stations, name only for extra-NA DX. There's lots of friendly activity but no crushing signals from big guns.

January 28-29: Winter Field Day. This is not nearly as big as ARRL FD but there will be diehard participants on the bands. Bonus points are available if you operate from a location other than home, also if you operate outdoors, or use no commercial power, or make a satellite QSO. Arizona stations have an advantage due to our mild winter weather. Scoring is somewhat complicated so check rules at: <http://www.winterfieldday.com/rules.html>



Southern AZ Public Service January 2017

## Upcoming Southern AZ Public Service Events

The following events are being held in this month. If you would like to help at any of these events send an email to the event coordinator. You can get more information about the events by clicking on the Event links. Specific communications requirements will be provided by the event coordinators. These listings are from [soazhamservice.net](http://soazhamservice.net).

Date	Event	Coordinator	Coordinator Email
Saturday Jan 28	<a href="#">AZ Trail Oracle Rumble</a>	Scott Boone K7ADX	<a href="mailto:scott@k7adx.net">scott@k7adx.net</a>
Saturday & Sunday, Feb 18-19	<a href="#">24 Hours in the Old Pueblo MTB Race</a>	Owen Watson AK7AR Steve Lane KY7K	<a href="mailto:ak7ar.owen@gmail.com">ak7ar.owen@gmail.com</a>  <a href="mailto:ky7k@arrl.net">ky7k@arrl.net</a>

This month's column will be a bit shorter than usual due to the holidays. The Tucson Marathon went off without a hitch. Several OVARC hams helped at various aid stations and bus loading locations. The Golder Ranch 147.32 repeater was used for the lower end of the race and performed flawlessly. Thanks, go out to our repeater team for the quality system they have built and maintain.

The only event on the calendar for January is the [AZ Trail Oracle Rumble](#). This event is like the Colossal Vail 50/50 as it combines a 50-mile run with a 50k run on the AZ Trail. The finish line for the race will be at Oracle State Park. Our own Scott Boone, K7ADX, will be COML for this event so look forward to his request for volunteers.

The big event coming up in February is the 18th 24 Hours in the Old Pueblo (24HOP) mountain bike race. This event takes place in the desert at Willow Springs Ranch northwest of Oracle on a 16-mile mountain bike course. Ham radio operators provide communications in support of Southern AZ Search and Rescue. The communication coordinators for this event are Owen Watson, AK7AR, and Steve Lane, KY7K. For pictures and more information about the 24HOP go to [Epic Rides 24 Hours in the Old Pueblo Event Guide](#). For information on the communications side of the event go to [24 Hours in the Old Pueblo MTB Race](#). All operators are welcome to attend but be advised that this event will challenge your operating skills and is a little more rugged than many public service events we volunteer for.

## THUMBNET AND NONGLES

My name is Wade VanLandingham W4VNO and I manage a non-profit organization called ThumbNet. ( <http://www.thumbsat.com/thumbnet> ) To quote part of our own page: ThumbNet was born to encourage students around the world to look up at the stars and to give them a chance to feel that they are part of something larger. The hardware to track and monitor radio signals from satellites in orbit is donated to the schools by ThumbNet, and with over 225 volunteer groups in more than 72 countries, we're having an immediate and positive effect on the lives of hundreds of students around the globe!

<http://www.thumbsat.com/thumbnet>

<http://www.nongles.com/>

ThumbNet's N3 SDR receiver is unique in its design and it is competitive in cost with the majority of the SDR dongles on Amazon or eBay. We design and produce updates of the receiver to meet the needs of the ThumbNet network, (This is the 3rd generation.) but due to minimum order quantities from the manufacturer, we end up with several hundred more than we need each time we do so. In order to not have thousands of SDR radios laying around, I try to offer them to others that share our education efforts (like Girl Scouts) or simply may have an interest in working with them (like HAM clubs). The small proceeds that remain go right back into the project to support its continued outreach and growth, and not into someone's retirement fund.

## CARE AND FEEDING OF LIPO BATTERIES

You may get several answers for this, but all battery tech sites state that when the 3 x 18650 lipos are at 11 volts they have used 80% of their capacity. For maximum life from the batteries that is when they should be charged. If you wait until 10 volts you will definitely shorten their life, perhaps by 1/2.

The 3 volt point on an individual battery is absolute minimum before likely destruction of the battery is imminent . But if you routinely charge only when the batteries reach that point they will last less than 50 cycles.

The main reason those powered "hoverboards" started fires is that they didn't have a fail safe and the batteries will get very hot if discharged below 3 volts, especially under heavy load.

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Larry J. Guthrie--KW5B

The reason that there are many answers is that there are many different battery chemistries out there. A good resource for the different types is here:

[http://batteryuniversity.com/learn/article/types\\_of\\_lithium\\_ion](http://batteryuniversity.com/learn/article/types_of_lithium_ion)

We design large packs of these cells with a custom battery management system to take proper care of them. The nominal cell voltage is usually about a 50% state of charge, so the 11V for a 3 cell pack is close to that. A 100 mV buffer at the upper and lower voltage ranges shown in the tables shown in the link is usually adequate to protect the cells. Larger buffers will prolong their life. Thermal management is a must during charge and discharge to prevent cell combustion. An active monitor to make sure no individual cell in a string goes out of the acceptable range is a good idea too. Small cell monitors with an audible alarm can be found at radio-control hobby stores for little money.

73

Mike N4MHO

### **DIY KX2 Battery Replacement**

**At least one seller on Ebay is offering a do-it-yourself 11.1V 2600 mAH battery for \$25.99 that will fit in a KX2. They don't mention the "KX2" part but it should fit since all others of this type do. Why this route?**

**The answer is that you're not only getting a protected battery, you're getting the ability to buy quality 18650 cells in the future without having to replace the protective circuitry.**

<http://www.ebay.com/itm/DIY-NCM-18650-2600mAh-Li-ion-battery-3S-11-1V-PCM-PCB-SOC-display-panel-/122155140757?hash=item1c71038695:g:7D4AAOSw4shX6wMJ>

AE5X, John Harper



Also on ebay. Search for **18650 balance charger** or

[http://www.ebay.com/sch/i.html?\\_from=R40&\\_trksid=p2050601.m570.l1311.R1.TR1.TRC0.A0.H0.X18650+balance.TRS0&\\_nkw=18650+balance+charger&\\_sacat=0](http://www.ebay.com/sch/i.html?_from=R40&_trksid=p2050601.m570.l1311.R1.TR1.TRC0.A0.H0.X18650+balance.TRS0&_nkw=18650+balance+charger&_sacat=0)

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Larry J. Guthrie--KW5B

Tidbits:

I understand that George NG7A found the hot spot on his 160M antenna and created some more fire-wood. Been there – done that. When I lived in an apartment on the east side of Tucson, I ran a 40-meter net using a dipole taped to the ceiling. I happened to be looking down the hall and noticed something glowing bright orange. It was the end of my dipole, and almost set the ceiling on fire! So a word to the wise – make sure the ends of the antenna are well insulated from anything flammable.

I was having problems with my Asus NT-66 router dropping out on the WiFi side. It would show a valid connection but wouldn't pass traffic. I replaced the 3.9A wall wart with a 4.5A model, and suddenly the dropouts ceased entirely (plus the new supply is cleaner).

Ron W7HD

Subject: 2017 Yuma Hamfest

Hi,

The Yuma Hamfest is just a little over two months away on February 17-18, and we would like to ask that you, your club or group help us in spreading the word about our event. Yuma has become the site of one of the largest hamfests in the southwestern U.S. and will be the site of the ARRL Arizona Section Convention for 2017.

We feature commercial vendors, tailgating, grand prizes worth over \$25,000, on-site RV camping, free parking, seminars held in parallel tracks, \$8 amateur license testing, DXCC card checking, an antenna clinic & transmitter hunt, our famous "Buzzard BBQ" dinner, a near-space balloon launch, great hourly door prizes, a hospitality area, the "Country Store" consignment sales area, and much more.

Admission is only \$5, tailgating spots are \$10 for the weekend, and we offer a food concession run by a professional chef. Our "Buzzard BBQ" dinner is only \$10. We hope you and members of your club mark February 17-18 on your calendars and plan on attending the Arizona Section Convention in Yuma.

Please check our website at [www.yumahamfest.org](http://www.yumahamfest.org) for more information. If you have questions, contact us at [info@yumahamfest.org](mailto:info@yumahamfest.org) or by phone at 928-305-1034. If you can, please announce information about the Yuma

Hamfest via your club's newsletter, meetings or local nets. Thank you very much for your help.

Hamfest Talk-In Frequency: 146.780 (-) PL 103.5 Hz

Email Contact: [info@yumahamfest.org](mailto:info@yumahamfest.org)

### SATELLITE TRACKING

There is a great site for finding out which satellites will pass over your location within the next 6 hours.

It is <http://www.n2yo.com/passes/amateur-radio.php> and also provides details on frequencies to use, details on the satellite itself, two-line elements for the satellite and much more. Here is a screen shot of the tracking portion of the site:

UTC

Satellite			Start		Max altitude			End		All passes
Name	Beacon (MHz)	Downlink (MHz)	Local time	Az	Local time	Az	El	Local time	Az	Info
<a href="#">CUTE-1.7+APD II</a>	<a href="#">437.275</a>	<a href="#">437.475</a>	07:27	NE 33°	<b>07:31</b>	<b>E</b> 95°	26°	07:37	S 167°	<a href="#">Track it</a>
<a href="#">XW-2A</a>	<a href="#">145.640/145.660</a>	<a href="#">145.685-145.665</a>	07:29	N 11°	<b>07:34</b>	<b>NE</b> 57°	89°	07:40	S 192°	<a href="#">Track it</a>

It doesn't just track amateur radio satellites, it also tracks just about everything up there. The menu bar allows you to hover any topic and get a drop-down menu for more details.

### DID YOU KNOW?

You can play your MP3 music with just a USB memory stick in your car. My wife was fighting a noise problem with her MP3 player on which I had just put all of her Christmas music. I got the idea of just plugging the USB stick containing the music into the car USB port. Lo and behold, the music played just fine with the car radio controlling the music, showing the songs, and more. As a bonus, the quality was actually better, since it wasn't being processed by the MP3 player.

**ON-AIR SWAP NETS**

7.240 Every Sat. and Sun. Starts around 12:30PM Controls are various. Covers West Coast.

3.915 On Sunday mornings at 10:00AM Pacific Time. Net control is Gary K7PG. Mostly northwest states

3.908 "WARFA" swap net. Wed. nights at 8:00 PST. This net is on the West Coast, but many check ins from the midwest.

3.922 Mid-West Swap Net On Sunday evenings from 5:30PM to 7:30PM PST

7.235 Chaverim Rag Chew/Swap Net Every morning at 11:30AM PST. Monday -Friday Western US. Net control WA6USL

3.908 "Northstar Traders net" - 8:30AM Central. (originates from Minnesota/Wisconsin area) Host W5MAZ

**Links to more swap net listings**

<http://www.af4k.com/mega/swapnets.htm>

<http://swap.qth.com/>

<http://www.na6r.com/wa6usl-swap-list/>

<http://ac6v.com/nets.htm#SWAP>

<http://www.radioing.com/radiotrader/links.html> - has many links to trader sites

MISCELLANEOUS LINKS

<a href="http://w7hd.ddns.info/sats/building-a-twinlead-lindenblad.pdf">http://w7hd.ddns.info/sats/building-a-twinlead-lindenblad.pdf</a>	Detailed instructions for building a 70cm or 2-meter Lindenblad using 300-ohm twinlead and PVC pipes.
<a href="http://groups.yahoo.com/neo/groups/mixw/info">http://groups.yahoo.com/neo/groups/mixw/info</a>	For MixW support
<a href="http://groups.yahoo.com/neo/groups/dopplergram/info">http://groups.yahoo.com/neo/groups/dopplergram/info</a>	For Dopplergram information
<a href="http://qthlocator.free.fr/">http://qthlocator.free.fr/</a>	<b>Find your maidenhead grid square on a map</b>
<a href="http://w7hd.ddns.info/freq-experimental.htm">http://w7hd.ddns.info/freq-experimental.htm</a>	Frequencies where those oddball modes like FSQ are found
<a href="http://linuxconfig.org/">http://linuxconfig.org/</a>	Good Linux tutorials, commands, etc.
<a href="http://sourceforge.net/projects/fldigi/files/">http://sourceforge.net/projects/fldigi/files/</a>	Where to download FLDigi files
<a href="https://groups.yahoo.com/neo/groups/azNBEMS/files">https://groups.yahoo.com/neo/groups/azNBEMS/files</a>	Information on NBEMS interfaces and installation
<a href="http://www.dj5hg.de/digitalmodes/digitalmodes.html">http://www.dj5hg.de/digitalmodes/digitalmodes.html</a>	MSRX is a receiver for meteor scatter for use parallel to WSJT. Requires Matlab Compiler Runtime to be installed.
<a href="http://stores.tgelectronics.org/the-new-n8xjk-boost-regulator/">http://stores.tgelectronics.org/the-new-n8xjk-boost-regulator/</a>	Battery boost regulator for constant DC output up to 15v
<a href="http://www.distrowatch.com/">http://www.distrowatch.com/</a>	Latest Linux releases with download links
<a href="https://fedorahosted.org/fldigi/wiki/Documentation/HOWTO/Windows_USBSerial">https://fedorahosted.org/fldigi/wiki/Documentation/HOWTO/Windows_USBSerial</a>	Taming the Wild Comport in Windows XP, Vista, and 7
<a href="http://www.nk7z.net/">http://www.nk7z.net/</a>	For equipment, software setups and reviews
<a href="http://www.quartzfest.org/">http://www.quartzfest.org/</a>	Quartzsite annual hamfest - nice webpage
<a href="http://www.tenforums.com/tutorials/3234-environment-variables-windows-10-a.html">http://www.tenforums.com/tutorials/3234-environment-variables-windows-10-a.html</a>	A list of all the environment variables in Windows 10
<a href="https://archive.org/details/73-magazine">https://archive.org/details/73-magazine</a>	Online archive for 73 Magazine EPUB, PDF, more formats
<a href="http://www.arrl.org/doctor">http://www.arrl.org/doctor</a>	"The Doctor Is In" podcast from ARRL
<a href="http://www.coilgun.info/hamradio/ic7100-fldigi.htm">http://www.coilgun.info/hamradio/ic7100-fldigi.htm</a>	uses FLRIG with FLDIGI to gain rig control.
<a href="https://www.george-smart.co.uk/wiki/FLdigi">https://www.george-smart.co.uk/wiki/FLdigi</a>	uses rigcat and the ic7100.xml file to control and gain PPT via CAT commands in r
<a href="http://www.ebay.com/usr/elecdesign2015?rt=nc">http://www.ebay.com/usr/elecdesign2015?rt=nc</a>	Chinese mfgr huge selection RF units
<a href="http://www.artscipub.com/repeaters/">http://www.artscipub.com/repeaters/</a>	Online repeater lookup by state
<a href="http://www.n2yo.com/">http://www.n2yo.com/</a>	Satellite track predictions and more. Also provides catalog number, frequencies, a map of the orbit, and much more!
<a href="http://heavens-above.com/">http://heavens-above.com/</a>	More satellite predicting
<a href="http://www.amsat.org/amsat-new/tools/predict/index.php">http://www.amsat.org/amsat-new/tools/predict/index.php</a>	AMSAT satellite orbit predictions
<a href="https://en.wikipedia.org/wiki/Comparison_of_remote_desktop_software">https://en.wikipedia.org/wiki/Comparison_of_remote_desktop_software</a>	Remote desktop software comparison. Yes, some support audio and video.
<a href="http://www.techrepublic.com/article/how-to-permanently-mount-a-windows-share-on-linux/">http://www.techrepublic.com/article/how-to-permanently-mount-a-windows-share-on-linux/</a>	Now you can keep your Linux and Windows machines sharing files.



<a href="https://myactivity.google.com/myactivity">https://myactivity.google.com/myactivity</a>	Control what Google collects about you
<a href="https://www.neverware.com/#introtext-3">https://www.neverware.com/#introtext-3</a>	Chromebook software for free - thanks to Scott K7ADX
<a href="http://www.linux-usb.org/">http://www.linux-usb.org/</a>	was created to serve as a central point of information for USB support under Linux.
<a href="http://www.ftdichip.com/">http://www.ftdichip.com/</a>	Has a wealth of information about FTDI chips and utilities such as USBVIEW for Linux and Windows.
<a href="https://www.dxengineering.com/parts/dxe-pl259">https://www.dxengineering.com/parts/dxe-pl259</a>	\$2.75 ea PL-259 Silver plated PTFE insulation
<a href="http://www.66pacific.com/calculators/small_tx_loop_calc.aspx">http://www.66pacific.com/calculators/small_tx_loop_calc.aspx</a>	Magnetic loop calculator - very useful

**FOR SALE LISTINGS**

The rules for entries are:

- [1] An entry will only run for one issue
- [2] Sellers name, call and a contact number and/or email address must be included.
- [3] A selling price (can be negotiable, such as \$100 OBO) must be included.
- [4] Pictures are desirable.
- [5] If this is a limited time offer, that time must be stated.
- [6] Entries must be submitted no later than the Monday following the club meeting, since the newsletter is normally published on the Tuesday following the club meeting.

**ITEMS AVAILABLE**

**Gentlemen, I have a bunch of 2" copper tubing available to anyone for free wanting to build a screwdriver antenna. Please email me at this address if interested. Will cut to length. Jim, W7ZNS [jbeaman352@gmail.com](mailto:jbeaman352@gmail.com)**

Clark KB4VYM has a Yaesu FT-450 radio in excellent condition. All HF+6M bands are covered in all modes. Original price was \$740. Asking price is \$650. Call him at 520-833-7783.

Ron, W7HD, has for sale a Yaesu az-el rotor with the dual controller and manuals on CD. Asking price is \$500 cash or best offer. Trades will be considered. The elevation rotor is in good working condition, but I don't have the connector for the azimuth rotors so couldn't test either of them, but you get both azimuth rotors with some rotor cable (about 50-100 feet). Can't climb the tower any more, so have to let them go. I will deliver in the Tucson area. Call me at 520-240-5322 or email me at [w7hd.rh@gmail.com](mailto:w7hd.rh@gmail.com).

## A System for High-Quality Audio Network Performance over the Internet

JackTrip is available for Linux, OS X, and Windows and the different versions can connect to any of the others.

[Linux](#)

[OS X](#)

[Windows](#)

Seren, using the OPUS codec, p2p Seren  
seren man page | ManKier

<http://holdenc.altervista.org/seren/>

<https://www.mankier.com/1/seren>

Seren is a simple VoIP program based on the Opus codec that allows you to create a voice conference from the terminal, with up to 10 participants, without having to register accounts, exchange emails, or add people to contact lists. All you need to join an existing conference is the host name or IP address of one of the participants.

Seren creates a dynamic peer-to-peer network of equivalent nodes which exchange text and audio data using a udp connection, and offers the user the ability to change the quality/bitrate on the fly, encrypt the traffic and record the calls.

Under Debian/Ubuntu all the dependencies should be satisfied by installing the following packages:

```
build-essential libasound2-dev libopus-dev libogg-dev libgmp-dev libncursesw5-dev
```

Many thanks to AA0HW for those links.

## Use Dataplicity to drastically simplify Remote Management of a Raspberry Pi

<http://lifel hacker.com/dataplicity-dramatically-simplifies-remote-management-of-1790053204>

Typically, if you wanted to control your Raspberry Pi from outside your network, you'd need to go through and set up your router to allow access from the internet, install some software on your Pi, set up a DNS, and cross your fingers you're doing that all securely. Dataplicity makes this a heck of a lot easier.

Instead of dealing with port forwarding, VPNs, or DNS, Dataplicity essentially grants access to your Pi's command line from a web app. This way, as long as your Pi is connected to the internet, you can access it from anywhere using Dataplicity's remote shell web app. Dataplicity doesn't inherently have root access, but you can grant it manually if you want. There's even a "wormhole" feature that al-

allows you to create temporary web sites from the Pi, which is especially useful for projects that include streaming video.

You can also easily reboot your Pi, which is helpful if you're running any type of automation project that might need a little kick in the pants now and again. You can access and manage multiple Pis this way, which could prove useful if you have a bunch of these things in the house. If you've ever wanted to connect your Pi to the internet at large, but weren't comfortable jumping through the security hoops to do so, this is one way to do so that's easy to manage.

**Saturday Breakfast at Village Inn on 26-Nov-2016**

As you can see, it was well attended. Join us! Every Saturday morning we start around 07:00-07:30, and there are usually at least a couple of gurus there to help you out with your rig programming, linux questions, etc.



**Using CW of course!**

I need the following information/articles:

- Dstar group activities
- Upcoming speakers
- Local nets and times

Deadlines for 2017 submissions (Monday following club meeting date):

Jan 23<sup>rd</sup>                  Feb 20<sup>th</sup>                  Mar 20<sup>th</sup>

Ron Herring W7HD Editor, Oro Valley Amateur Radio Club Newsletter

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**Feel free to email me at [newsletter@tucsonhamradio.org](mailto:newsletter@tucsonhamradio.org)**

**Please note that all articles submitted may be edited for spelling mistakes. My document program does automatic spell checking (LibreOffice Writer). PLEASE DO NOT USE DOCX FORMAT - it really hoses my import function. DOC, RTF, PDF, ODT, TXT are all acceptable.**



**Ron Herring W7HD**

**Newsletter Editor**

**Serving Pima County and Southeast Arizona**