



EASTERN ARIZONA AMATEUR RADIO SOCIETY INC.



EST. 1974

Club Address:

EAARS
P.O. Box 398
Solomon, AZ 85551

www.eaars.com

May 2015

4H Ham Radio Project at the Pima County Fair

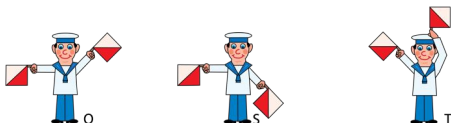
The Vail Vaquero's 4H Ham Radio project did an phenomenal job of representing ham radio at the Pima County Fair. There are six youth members in the project. Jake, Jacob, Max, Zane, Sitka and Jerico.

Jake, Jacob, Max, Zane and Jerico built a buddy pole and dipole antenna. Sitka and Jerico built a transceiver. I am proud to announce that the kids all scored high enough to received a blue ribbon on their projects. Unfortunately, two members were unable to present their projects to the judges. Thankfully, they will still receive a ribbon for their efforts in building the projects.

I want to say a special thank you to our judges Dennis, *AF7GH* and Linda Lou, *AF7FT* Stonehocker. They were very generous by volunteering their time to judge the kids and their projects. They took extra time with them afterwards to talk with them about ham radio and it was a wonderful experience for all the kids.

Lani Dzicek, *N3IDN*

(See photos on page 3 of this newsletter.)



Rumour has it, that there is now a DMR digital repeater on Jacks Peak!

ARCA Rep Needed

A new Amateur Radio Council of Arizona (www.arca-az.org) representative is needed.

The main duties of this position include attending a majority of the ARCA meetings held throughout the year at major Arizona hamfests and reporting the results of those meetings at the bi-monthly EAARS meeting or via email to the EAARS officers.

If you have a interest in this position, please contact Dave, *N7AM*.

EAARS OPEN REPEATERS

- PL 141.3 UNLESS NOTED OTHERWISE
- ECHOLINK: 614350 IRLP: 7787**
- HELIOGRAPH PEAK AT SAFFORD, AZ:**
146.860, 440.700 LINKED
146.900
145.010 PACKET
- JACKS PEAK AT SILVER CITY, NM:**
145.210 LINKED
- WEST PEAK AT FT THOMAS, AZ:**
145.350 ACCESS TO LINK TO NETWORK
- PINAL PEAK AT GLOBE, AZ:**
145.410 LINKED
- SOUTH MT AT ALPINE, AZ:**
145.270 LINKED
- CABALLO MT AT TORC, NM:**
145.470 LINKED
- GREENS PEAK AT SHOW LOW, AZ:**
146.700 LINKED
- LITTLE FLORIDA AT DEMING, NM:**
147.060 LINKED
- MULE MT AT BISBEE, AZ:**
147.080 LINKED
- MT. LEMMON AT TUCSON, AZ:**
147.160 LINKED
- GUTHRIE PEAK, AT CLIFTON, AZ:**
147.280 LINKED

WN7BSA Rookie Round-up!

WN7BSA was “on-the-air” again for the ARRL Rookie Round-up Contest. The station was activated at the K3TYE location with three “Rookie” licensees operating the contest. KG7EXC, Kyle, operated on 10- and 15-meters using an heirloom Drake TR-4 while KG7RHJ, Jake, and KG7RHK, Andy, operated on 20-meters using an ICOM 746. This was their first experience operating in a contest on HF radio. KG7RHH, Sean, took over the 20-meter position later in the day.

The Rookies made contacts in twenty states as well as the Virgin Islands, and Canada. Our total score was 1012. So after we looked at our total score, we decided that we were in the contest for the experience rather than for the win!!! All had a great time and the participants consumed about one-dozen home-made chocolate chip cookies.

As the Arizona Diamondbacks always say, “Wait ‘till next year.”

Joe, *K3TYE*

(See photos on page 4 of this newsletter.)

EAARS Badges

Club badges are now available, see:

www.eaars.com/newsletter/badges.htm

For ordering information. Show your club colors!



2015 Officers and Staff

eaarsofficers@eaars.com to email all officers.

President

Dave Wells
N7AM

Technical Adviser

Milt Jensen
N5IA

Vice President

Dan Quaintance
AF7EF

Newsletter Editor

Steve Lane
KY7K

Secretary/Treasurer

Larry Griggs
N5BG

Net Manager

Chris Buchanan
N7JND

Site Trustee

Joe Montierth
K7JEM

ARCA Rep

Open

Net Control Operators

Rick *KE7EDP*
Bob *KD7LMV*
Karl *N7DMA*

Angie *N7EMB*
Chris *N7JND*



For Sale

Kenwood TS-711A

\$340.00

2M All-Mode with optional PL encode board
Built-in Power-supply AC & DC operation
Works fine, from non-smoking home.

Contact Steve, KY7K

ky7k@arrl.net



Pima County
Fair
2015



KG7EXC making another contact on 10-meters during the Rookie Roundup.



KG7RHJ tuning in a contact during the Rookie Roundup



Ham License Testing

There are four monthly VE test sessions in the **Tucson Area**.

Lighthouse YMCA / ARRL: First Thursday
Contact Matt, *AC7IL*, veregistration@ac7il.org

Oro Valley / ARRL: First Saturday
Contact licensing@tucsonhamradio.org

RST / Laurel (No Fee): Second Monday
Contact Diane, *A43OF*,
dzimmerman2002@gmail.com

Jacobs Park YMCA / ARRL: Third Saturday
Contact Fred, *K7OFA*, k7ofa@arrl.net

Graham / Greenlee County Area
For VE testing on request, please contact Dave,
N7AM, and he will arrange it.

Technician License Class - Tucson
Every Tuesday, 6:30 - 9:00pm at TMC.
Contact Dan, *KC7VDA* for info.
kc7vda@gmail.com

Coming Events

Near and Far...

- **CARA Hamfest: May 2**
See flyer in this newsletter
- **7th Area QSO Party: May 2**
<http://ws7n.net/7QP/new/page.asp?content=start>
- **ARRL VHF Contest: Jun 13-15**
<http://www.arrl.org/june-vhf>
- **ARRL Field Day: Jun 27-28**
<http://www.arrl.org/field-day>

MAY

sun	mon	tue	wed	thu	fri	sat
26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Send Event and Calendar
additions to
newsletter@eaars.com

For Sale

MFJ 43' Vertical
Antenna

\$275.00 or best offer

Only two months old!

Contact Jon, *W1JTS*

520-419-9900 or 520-385-1264

For Sale

Yaesu FT-897D

\$875.00 or best offer

Includes DTMF Microphone
and Yaesu FC-30 Autotuner

Works fine, from non-smoking home.

Contact Jon, *W1JTS*

520-419-9900 or 520-385-1264

GUIDELINES FOR REPEATER USE

or

Read it! Remember it! Practice it!

The EAARS Network is a high traffic repeater system with a very large coverage area, and as such, we often need some reminders of proper operation. These guidelines are not intended to be hard and fast rules, but rather things to remember and consider when using the network or any repeater. Many of these things are common sense or common courtesy, so keep them in mind.

Coverage: The system covers several thousand square miles, in parts of three states and two countries. Remember to keep your conversations short and try not to monopolize the system. If you are close to the person you are wishing to talk to, and you are only wanting to talk with him, you might consider simplex or another repeater, if your conversation will last more than a few minutes. There is no reason to tie up multiple repeaters with extended one on one conversations when you are only a few miles apart. Remember to allow ample time between transmissions to allow for people to join the conversation. If you are not wanting to be interrupted, then the conversation might be better to have on the telephone. Remember that people everywhere can hear what you say, there is no privacy.

The system is designed to give priority to mobile operations, especially during morning and afternoon drive times. This may be the only time some people have to get on the radio, so defer to them as they travel to and from work. If you are operating from a fixed location, and have plenty of hours in the day to use the radio, then utilize the system during the slower times.

Timing: The repeater system is not instantaneous. There is a time delay from when you key the microphone to when the other parties will hear your audio. This typically is at least half a second or so. So, key the mic, give a short pause, then start your statement. If you say a single word or a short phrase, it may be clipped and not heard properly (if at all) on other repeaters in the system. There is a “beep” that occurs about a second and a half after a person unkeys. This is known as a “courtesy tone”, and lets others know that you have finished. You should wait for that beep before you start talking. This second and a half delay gives time for people to break in with emergency traffic, or just to add comments or join the conversation.

The repeater system has a “hang timer” of around five seconds. That is the time delay from when you finish talking to when the repeater transmitter drops off. In normal usage, the repeater doesn’t have to drop out, and you should not wait for it to drop. Wait for the second and a half, then the beep, then pick up the conversation. If you wait for the carrier to drop, it adds a lot of dead time to your usage.

The repeater also has an approximate 3 minute “time out timer”, which limits the amount of time any single transmission can last. If you transmit longer than that, the timer will cut you off. The timer affects the link transmitter, so when it times out, the rest of the system will act normally. If you are timing out the repeater on a regular basis, you need to rethink your conversations. This isn’t HF!

Jargon: Avoid CB style jargon and “hamisms”. This isn’t CB radio, so leave the “10-4s”, “seventy thirds”, “got your ears on”, (and any other stuff that is common on CB) off the network. Likewise, there are a lot of other things that come from ham radio that aren’t needed. You don’t need to use Q signals or other abbreviations that are meant for CW operators. We’re not sending code, so we don’t need things like “QTH”, “XYL”, or “HI HI”. Plain language rules on 2M FM, so use it! You don’t sound more like a ham when you say things like “Got to QSY to the dinner table, the XYL is wanting an eyeball QSO, hi hi.” Likewise, you don’t need to use the word “handle” when referring to your name, and certainly don’t use “personal”, as that is straight from CB. Just say, “the name here is Bob” (unless of course it is something else).

Signal Quality: We use FM on two meters. That means the audio quality is going to be pretty good, if you have a decent signal into the repeater. Your signal level is how well your radio is getting into the repeater. This is usually reported by the station you are talking to by referencing the amount of noise in the background, while you are talking. A good strong signal to the repeater will be reported as “full quieting” or “no noise on your signal”. A weaker signal might be reported as “readable, but has some (or a lot) of noise”. A very weak signal will be reported as “barely making it”, “in and out”, “hard to copy”, or some other report that indicates that the signal is poor. If your signal is not good, it is best to wait and continue your conversation when you get into a better location. Don’t force everyone to try and decipher a barely readable signal! Unless you are in an emergency situation, or need to get some urgent message through, just relax and try again later. You may be hearing the repeater fine, but that doesn’t necessarily mean that the repeater hears you as well. The repeater is fairly balanced when using a 25 to 50 watt mobile radio; if you are hearing it good, you will probably be getting into it about the same. But many people are using a 2 watt handie talkie, and that just doesn’t work well unless you are pretty much line of sight to the repeater. If you’re on an HT, and are getting poor reports, you might try a different location. Sometimes just a few feet will make a big difference.

Along with signal, audio quality and level are very important. If your transmit audio is too strong, or too soft, it will be hard to understand you. If you get reports of “low audio”, get closer to the microphone, or speak up. Many of the newer Chinese handheld radios are coming with somewhat low audio, and you may need to speak closely, clearly, and somewhat loudly in many cases. And get an external antenna for that HT if you plan on using it much in the mobile!

Courtesy: The repeater doesn’t belong to you, so you need to share it. Don’t feel obligated to interject comments into every conversation going on and if you do have a comment it should be related to the current topic! Likewise, don’t be surprised if someone breaks in to add some comments or information about what you’re talking about. If you need to break in, give your callsign. If you say “Break” or “comment”, the system is not likely to pick up fast enough so that everyone hears that single word. You may think you’re being ignored, but what really happened is that they did not hear you. Your callsign takes enough time that the system will pick up, and even if they don’t hear the whole call, they may pick up the last few letters and realize that someone is breaking in.

Policing the Air: If you hear someone you think is doing something wrong on the repeater, please, **DO NOT** confront or attack them. Send a message to eaarsofficers@eaars.com with date, time, calls and a brief description of the problem and the officers will investigate and deal with it. IF you think “they” are in violation then joining the conversation may also put you in violation. If it is a serious violation like “somebody taking requests and playing music on the club repeaters” then feel free to call *N7AM* day or night but, **PLEASE DO NOT** add to the problem by getting involved.

If you hear a new ham struggling, then explaining about the timers and waiting for the beep or pausing before they start talking, or offering general technical guidance *in a polite manner*, that’s great. (That means ask for a break, identify, and offer the assistance, not scream “wait for the beep” anonymously, *that is a violation*). Elmer to your hearts content. Most of the new users will appreciate it. If they tell you they don’t want to hear it then leave them alone!

Doubling: This happens when two people talk at the same time. What will happen is either that the audio will mix, and you hear both people, but can’t understand either one, or you will hear some interference that makes it hard to understand either transmission. To prevent this, try to make sure it is your turn to talk, and when you turn it over, say the person’s name or callsign. “Over to you, Tom,” or “Go ahead, K7XXX.” If you say, “Pick it up, someone”, then you are asking for multiple people to transmit.

Identification: Give your callsign as mandated by the FCC, every ten minutes, or when you clear off. You don’t need your call each time you transmit, if the transmissions are short. And don’t overuse phonetics for your name or callsign. If your name is Mark, people probably get that. You don’t have to say, “name is Mark, Mary, Adam, Roger, Kilowatt”, unless the people aren’t getting it right. You also don’t have to say, “K7XXX for identification purposes” or “K7XXX for ID”. What else would it be for?

Jammers: Occasionally there are unidentified people who will try to interfere with ongoing communications, play music, or hurl insults or profanity. **DON’T ACKNOWLEDGE THE JAMMER!** Carry on as normal, or clear off. The jammer is there to get a reaction from the users. You play into his game when you talk about him, challenge him, try to reason with him, or argue with him. **DON’T DO IT!** It is never appropriate to talk about jammers on the air. If it is recurrent or chronic, the control operators will take appropriate action. In most cases, control ops will do nothing, since it is the intent of the jammer to disrupt communications, and shutting down a repeater does just that. If you have the capability to monitor the input of the repeater, you can try that to see if you hear him. But don’t announce it over the radio, just log where you were and how strong the signal was on the input channel. Jammers have existed since the advent of ham radio, over 100 years ago. So, nothing new.

Nets: The EAARS network has several nets that meet regularly, at specified times. These nets are for some specific purpose, some are for general check in, others are for traffic handling. Although the nets do not have absolute priority, it is good practice to relinquish the repeater system if you are using it when the net is ready to start. You can finish your conversation when the net is through. If you are conducting emergency or priority traffic, the net will stand by for you.

IRLP and Echolink: The system has connection to internet based amateur radio linking. Another document on the EAARS website gives instructions on how to use this, and the protocols and procedures involved. If you use these connections, remember that you are tying up a large network, so keep your conversations succinct. Be courteous to other users. If you hear someone using these connections, please be courteous to them.

Making a Contact: If you want to make a contact, simply announce your callsign and say that you are monitoring or listening. You don’t need to repeat it several times. If someone wants to talk to you, they will give you a call. If you are listening to an interesting ongoing conversation, you can call one of the parties after they have cleared off. That’s a good way for newer hams to meet new friends. People will almost always respond to a direct call if they have the time. If you have a new radio setup or installation, you can ask for a signal report. Usually someone will respond. But don’t make a habit of it. That should be reserved for changes or new equipment. Listen first to how things run on the system, and emulate the good operators.

Topic Content: The EAARS network is an open repeater system with many users. Be respectful in your choice of topics. Controversial subjects are discouraged, as they tend to cause divisiveness. Do not engage in on air arguments with other amateurs, it serves no useful purpose. Do not let your emotions rule your words, think twice and speak once.

Support: EAARS is an open membership club, and sponsors all of the repeaters on the network. There is considerable cost involved with purchase, installation, maintenance, and ongoing services. If you use the system frequently, please join to support the system. The dues are only \$24 a year, so it shouldn’t be a burden on anyone. No one will be asked to leave, or refrain from using the repeater simply because they are not a member. If you hear a new user on the system frequently, encourage them to join the club and point them to our website.

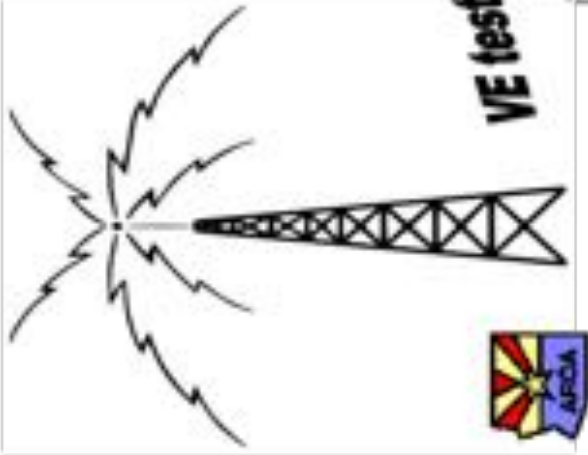
www.eaars.com

Changes and additions are in RED

CARA Hamfest

COME ONE - COME ALL

**CARA HAMFEST MAY 2 SIERRA VISTA
OVER 10 RAFFLE PRIZES PLUS
TAILGATERS, VENDORS, FOOD TOUR THE
COCHISE COUNTY
MOBILE COMMUNICATION UNIT.
ADMISSION \$3 AND GET A FREE
RAFFLE TICKET!
TAILGATERS \$5/INSIDE TABLE \$10.
GATE OPENS 0700
SEE WWW. K7RDG.ORG FOR MAP AND
DIRECTIONS
COCHISE AMATEUR RADIO ASSOC.**



VE testing 9AM

JUNE 6, 2015



Contact: K-K
kb9si@yahoo.com
480-586-6303

**Tailgaters
\$5/space**

WHITE MOUNTAIN

HAMFEST

SHOW LOW, AZ

CITY HALL PARKING LOT

180 N. 9TH ST

**Prize Drawings
hourly and GRAND**

**Talk-in frequency
145.31 - pl 110.9**



**Overnight RV camping
available after 5:30PM Fridays**



Refreshments Available



sanctioned event



2015 ARCA / WILLIAMS HAMFEST
JULY 24, 25 & 26, 2015

ADVANCED NOTICE



*Presented by the Amateur Radio Council of Arizona
and the City of Williams*



ADVANCED NOTICE

WILLIAMS RODEO GROUNDS, RODEO ROAD, WILLIAMS, AZ
GATES OPEN AT NOON THURSDAY, JULY 23 FOR SET-UP.
HAMFEST OPENS AT DAWN FRIDAY, JULY 24.

FREE ADMISSION!

JULY 26, 2015 - GRAND CANYON TRAIN TRIP

MEETINGS, SEMINARS, ACTIVITIES,
COMMERCIAL VENDORS,
HUGE SWAP, VE TESTS

PRIZES

DOOR PRIZES EVERY HOUR
RAFFLETICKETS
\$12 for \$20, or 3 for \$5.00

SATURDAY NIGHT BBQ DINNER
AT RAILSIDE RV RANCH

RESERVATION INFORMATION
available soon

SUNDAY GRAND CANYON TRAIN
TRIP



Visit the ARCA Web Site
www.arca-az.org

Talk-In - 146.78 - (91.5 PI)

On-Line Reservation Available on Web Site Soon
Or Call - 602.881.ARCA (2722)

August 7-9, 2015

Albuquerque Marriott Pyramid North
5151 San Francisco Rd NE
Albuquerque, NM 87109

2014 Prizes (2015 is Similar)

Icom 7100
Yaesu FT-450
Elecraft KX3
Kenwood TM-281
Icom ID-880
Yaesu FT-7900
Yaesu FTM-400D

Hamfest Fees (Preliminary)

Pre-Registration
Includes 1 Free Prize Ticket
Registration at Door \$5.00
Extra Prize Ticket \$7.50
Flea Market Table \$2.00
Ham Table with Electricity \$15.00
Commercial Booth \$20.00
Tailgate Space (1) Call
RV Space Per Night \$5.00
Friday Night Mixer \$10.00
Saturday Contest/EMCOMM Breakfast \$12.50
Saturday BBQ Lunch \$17.50
Sunday Evening Banquet At Door
Sunday New Ham Breakfast \$30.00
\$15.00

Rooms at Marriott Pyramid—\$89 + Tax
<https://resweb.passkey.com/go/albuquerquecityhamfest>

Limited RV parking available on hotel grounds. No hook-ups available. Full service RV parks available nearby.

Ham Radio Fun For Old-Timers & Novices

New in 2015

Bigger & Better Than 2014
New Venue & Better Floorplan
All Activities Close Together
Nicer Indoor Sales Area
Tailgate Friday & Saturday
Open All Day Friday
Improved Friday Mixer
New Saturday BBQ Lunch
Good Equipment Auction
Contest University
FCC & New Rules Forum

Themes

Building & Modifying Equipment
Contesting
Emergency Communications
Attracting New Hams
STEM Education & Ham Radio
Hands-On Projects
How to Get and Stay Active

Talk In Repeaters

Courtesy of Amateur Radio caravan Club
145.33 (-600 KHz, 100 Hz PL)
444.0 (+5 MHz, 100 Hz PL)



ARRL New Mexico

Regional Hamfest Serving

New Mexico
Colorado
Utah
Wyoming
West Texas
Oklahoma
Arizona
Nevada
Mexico



Special Guest Speakers

To Be Announced

ARRL Leadership

Riley Hollingsworth (K4ZDH)

Retired FCC Enforcement Special Counsel

"Changes in FCC complaint procedures and how they affect Amateur radio" and "Our continuing duty to Amateur radio"

To Be Announced

Contesting / EMCOMM Community

Albuquerque Duke City Hamfest

Conference

The DCHF is a great source of information on all aspects of ham radio. Multiple simultaneous activity tracks with emphasis on current topics of interest to old hams and newcomers alike. Many popular forums will be repeated so as to minimize chances for conflicts.

** Contest Academy **

HF, DX and Contesting
EMCOMM & Public Service
STEM, Education & New Hams
High Altitude BalloonSAT
AMSAT / Moonbounce EME
ARRL, ARES & RACES Forum
Builders & Makers Forums
Teachers & Educators Forums
SDR, D-STAR, FM, Repeaters
Equipment Design & Fabrication
Using Test Equipment, How to Solder
Remote Operation, Building a Station
MARS, CAP, SOTA
Mesh Networking, Raspberry Pi

Hamfest

The DCHF provides the best opportunities to see, feel and touch the latest new equipment, antennas, publications, and accessories. Check out our expanded new equipment and flea market area for bargains on used gear, components, hidden treasures, and goodies you did not know

2014 Dealers & Manufacturers

Ham Radio Outlet
Yaesu * Icom
Flex Radio * Elecraft
DZ Kit * Ham Radio School
Wired Communications
RT Systems * CQ Magazine
High Tech Liquidators
Tactical Communications
Southwest Antennas
WB2CUK Products
In Logis * Ham Crazy
Daryl's Electronics of El Paso
El Paso Antenna Co
The Original Wireman
CAIG Laboratories
QRP Works * NM-Mesh
ARRL * QCWA

Activities

The DCHF is 3 days of ham radio fun for the learned and learning alike. Chew the rag with old and new friends, and visit our many socials, demonstrations and banquets. Bring the family and enjoy local attractions, museums, shopping

Good Equipment Auction

Friday Mixer with Vendors
Saturday Contesting Breakfast
Saturday BBQ Lunch
Saturday Awards Banquet
Sunday STEM/New Ham Breakfast
Near Space Balloon Project
Tech/General License Review
VE License Testing
Specialized Modes Demo
Skywam Class
Hidden Transmitter Foxhunt
Tours of Local Attractions
Tour of Old Town Albuquerque
Contests & Competitions



Duke City Hamfest
Albuquerque, New Mexico

<http://www.DukeCityHamfest.org>

For More Information

Bill Ripley (KY5Q), Chairman
KY5Q@arrl.net
(505) 503-7491