



EASTERN ARIZONA AMATEUR RADIO SOCIETY



EST. 1974

INC.

Club Address:

EAARS
P.O. Box 398
Solomon, AZ 85551

www.eaars.com

July 2014

ARRL Field Day 2014

From the information I've been able to gather, the EAARS 2014 Field Day at Cluff pond was a success; Although, cousin Murphy did show up uninvited and stayed beyond his welcome!

Everyone I spoke to, or heard, had a lot of fun and won't soon forget the experience, even without the mag 5.2 earthquake!

The club made approximately 400 QSOs (108 CW) running as 4A AZ. On the downside the digital station and GOTA (Get On The Air) station never were able to get on the air due to radio and logging issues.

On the positive side the turnout was outstanding with at least 26 folks if you count Sheriff PJ Allred, and Brian Douglas and Hank Metzger from Graham County emergency services; Internet connectivity was brought in from over 10 miles a way via Dan's, *AF7EF*, Mesh Network; And Byron, *AA7BM*, taught a class on how to build a 2m slimjim antenna.

See photos from the EAARS FD in the rest of this newsletter.

Operators: Dan, *AF7EF*; Brad, *W0VFT*; Pierre, *AB1OM/F4HCI*; Larry, *W7LEE*; Beth, *AA7NW*; Curt, *W0RGU*; Jacob, *KG7EQN*; Gary, *W7MLN*; Wendell, *W7WGW*; Penny, *KE7EDQ*; Byron, *AA7BM*; and Dave, *N7AM*.

Other support folks: David and KJ Lee, kept folks fed; Dave's, *N7AM*, daughters Robin and Dawn, helped with setup and teardown; Dan's, *AF7EF*, grandkids Virginia (signage),

Tabatha (signage), Syrena, Dakota, Caylun and Titus.

Somehow time was also found to run a Laurel VE test session that resulted in one new ham, Nicholas, *KD2GVH*. Congratulations Nicholas!

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
447.825 WITH CLOSED REMOTE BASE
PL 100.0 OR 141.3

JACKS PEAK AT SILVER CITY, NM:
145.210 LINKED

PINAL PEAK AT GLOBE, AZ:
145.410 LINKED

SOUTH MT AT ALPINE, AZ:
145.270 LINKED

CABALLO MTN 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

2014 Officers and Staff

eaarsofficers@eaars.com to email all officers.

President

Dave Wells
N7AM

Technical Adviser

Milt Jensen
N5LA

Vice President

Quentin Kavanaugh
N7QK

Newsletter Editor

Steve Lane
KY7K

Secretary/Treasurer

Larry Griggs
N5BG

Net Manager

Grace Wells
KB7CSE

Helio Site Trustee

Joe Montierth
K7JEM

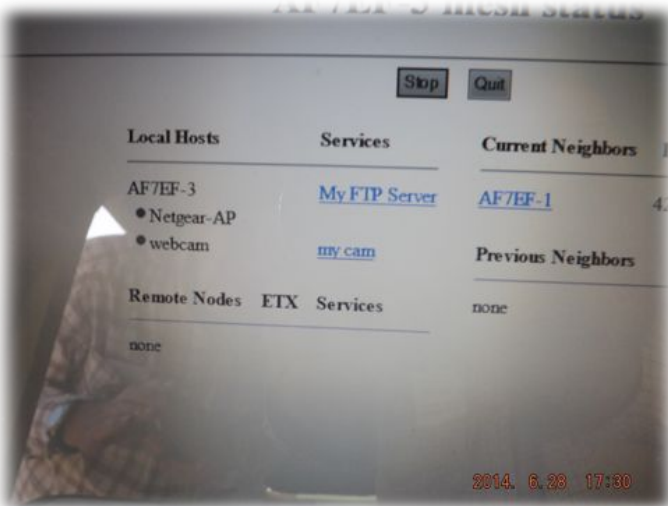
Net Control Operators

Rick *KE7EDP*
Dan *AF7EF*
Chris *N7JND*

Grace *KB7CSE*
Bob *KD7LMV*
Pink *K7ILA*



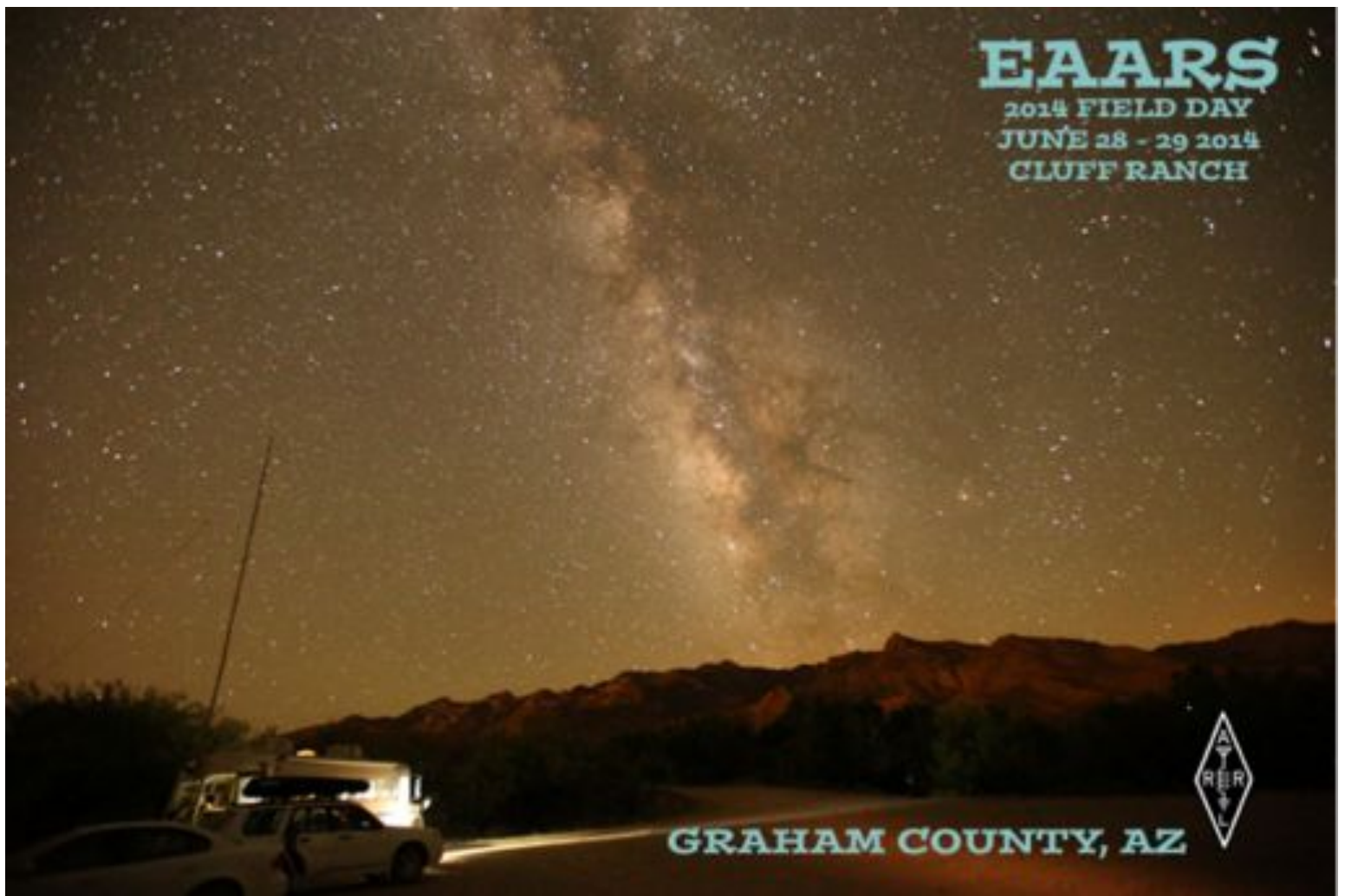
40m and 80m
dipoles



Join us every Sunday night at
7pm on the EAARS Network
repeaters for our Sunday
Night Net.
Everyone is Welcome!



Mesh antenna
for internet



Courtesy of Brad, *W0VFT*; and Pierre, *AB1OM*





**Dan's, AF7EF, homemade Moxon antenna was all the rage!
Dave, N7AM, 5BTV vertical was a workhorse.**



Dan, AF7EF (logging) and Curt, W0RGU (operating) making Qs!

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 David, *AK2L*, ak2l@arrl.net

RST/ Laurel (No Fee): Second Monday
Contact Diane, *AA3OF*,
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...

- **Tucson Summer Hamfest: Jul 19**
See Ad in this issue
- **CQWW VHF: Jul 19**
www.cqww-vhf.com/2013CQVHFRULES.pdf
- **NAQP - RTTY: Jul 19**
www.ncjweb.com/NAQP-Rules.pdf
- **EAARS Meeting: July 22**

JULY

| sun | mon | tue | wed | thu | fri | sat |
|-----|-----|-----|-----|-----|-----|-----|
| 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 |

Send Event and Calendar additions to newsletter@eaars.com

Picnic!

The annual EAARS picnic will be on September 13 at the Discovery Park in Safford, Arizona!

Mark your calendars now! Or, if you are like me, request that weekend off from work and then mark your calendar!



GUIDELINES FOR REPEATER USE

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. 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. 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.

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". 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

TUCSON SUMMER HAMFEST

Saturday, July 19, 2014

7 A.M. - NOON

Hosted by:



The Border Area Radio Team

FREE ADMISSION & PARKING

Map and Information: www.wd7f.com/bart.htm

- Seller set-up starts at 6:00 A.M.
- Vendors/Tailgaters pay \$10.00 per space
- Free Overnight Parking After 6:00 P.M. Friday

Drawing Prize: Dual-Band Hand-Held Transceiver

Raffle Tickets: \$2 each - 3 for \$5 - 7 for \$10

Hot Coffee, Tea and Donuts Available

TALK-IN REPEATERS:

146.94 (110.9) - 146.96 (127.3)

224.74 (136.5) - 448.35 (107.2)



Golden Corral Buffet & Grill

4380 East 22nd St - Tucson, AZ 85711

(South parking Lot - Just East of Columbus)