



# EASTERN ARIZONA AMATEUR RADIO SOCIETY INC.



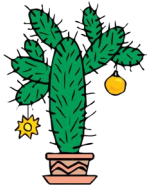
EST. 1974

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**December 2014**



## Festivus for the Rest of Us

Seinfeld fans should remember that the Costanza family celebrated Festivus, rather than Christmas. Festivus included dinner, the Festivus pole, Feats of Strength, and the Airing of Grievances. It is this final practice, Airing of Grievances, that this month's newsletter seems to celebrate. I didn't plan it that way, it just sorta happened...

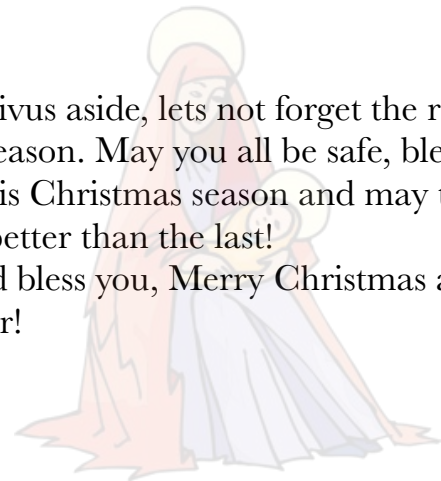
Rick, W5CF, submitted the page two article on HF operating that has some very good operating tips, a must read for old-timers and newcomers alike.

Over the past few months I've noticed more and more of what I would consider "questionable" operating practices. Not necessarily bad practices, but ones that could most defiantly be improved upon. Some of this is a direct consequence of more and more folks discovering our wonderful network and joining in on the fun. The network is just busier than it has been in the past, at least that I can recall.

With the additional activity it behoves us all to make sure we all operate in the least bothersome and confusing fashion possible and too this end I've republished the "Guidelines for Repeater Use" article from the July newsletter and the EAARS website. Please, even if you've already read this article, read it again in full. This edition has a few small updates and is suitable for printing out and framing ☺ Pay special attention to the sections on "Courtesy" and "Doubling".

Festivus aside, lets not forget the real reason for this season. May you all be safe, blessed and happy this Christmas season and may the new year be better than the last!

God bless you, Merry Christmas and Happy New Year!



## 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

# HF Hints and Tips

Over the last several weekends, I have had the (pleasure) opportunity to work several contests on HF, those being the DX and Sweepstakes. There were several things I have noticed across both contests with NEW people coming onto the bands. And by new, I mean inexperienced, regardless of license class. There were EXTRA's that were just as guilty as the TECH's.

The first thing when transitioning from FM to HF SSB is to remember that it is NOT channelized. You should tune to your station. I heard contact after contact where the calling station was off frequency. The RUN station was not on an exact frequency, say 28.352.32. The newer operators would always tune to the exact frequency above or below his CQ frequency, and not to him. In some cases they were so far off it was very difficult to even understand them.

This made the exchange harder than necessary, and slowed the run rate of the CQ station considerably. To the serious testers, that is a big thing. The RUN guy is not going to "give-up" his CQ frequency to go find you; instead he has to turn on his RIT and try and tune you in. This all takes time and effort away from his busy contest time, caused by you being off frequency. So he really considers whether your contact is worth the effort, and for you, that may not be a good thing.

Other than the fact that it is simply not necessary, there are reasons why the RUN stations are on "in-between" channels. The first of which, is to eliminate interference from other stations. 10kc can make a difference on the edge of an interfering signal. Just moving a short ways away from the interference can make things more workable.

And that brings me to my second point. Most new people don't know WHEN to use the RIT on their radio. Once you have made first contact with your station, you probably should NOT touch the VFO again. If your contact changes slightly to adjust to you, and then you adjust to him, and he has to re-adjust to you and you.....well, you will just end up chasing each other across the band. ONCE contact is made, don't touch the VFO. If you need to, activate the RIT and adjust his frequency with the RIT/clarifier. This will leave your transmit frequency right where HE is expecting it. It's not a big deal in a short contest exchange, but in long rag-chew it could make a big difference.

The third thing I noticed is people were very apprehensive about the exchange, especially during the complicated Sweepstakes exchange. You need to get it right, yes; BUT is not a one shot chance. You can listen to

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eaarsofficers@eaars.com to email all officers.

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the run station give it several times before you call him. Even listen to his exchange one after you to make sure you have your serial number right. Don't be afraid of getting it wrong. Get in there and get it down.

And my final plea. I have spent 35 years as a professional communicator. I have instructed classes, and trained many operators on the 911 system. One thing I FORBID.....do not take notes on scratch paper. GET IT IN THE LOG! I would rather have the ugliest hand written note on an official log, rather than the neatest written notes on a piece of scratch paper that has been thrown away to never be seen again. It may take a few seconds longer, but get it in the LOG, the first time and don't make duplicate work for yourself. This is especially true if you are trying to read your own writing after the fact and type into a computer log. Get it in the LOG to begin with and be done with it.

Get on the air and have some fun!

73 de Rick, *W5CF*

*(These tips apply to all HF operation, not just during contests! NEVER respond to a CQ and tell the CQ'er he is off frequency just because his frequency doesn't end with a 0 or 5! — Editor)*

# 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](mailto:veregistration@ac7il.org)

*Oro Valley/ARRL*: First Saturday  
Contact David, *AK2L*, [ak2l@arrl.net](mailto:ak2l@arrl.net)

*RST/ Laurel (No Fee)*: Second Monday  
Contact Diane, *AA3OF*,  
[dzimmerman2002@gmail.com](mailto:dzimmerman2002@gmail.com)

*Jacobs Park YMCA/ARRL*: Third Saturday  
Contact Fred, *K7OFA*, [k7ofa@arrl.net](mailto: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](mailto:kc7vda@gmail.com)

## Coming Events

*Near and Far...*

- **AZ Trail Half-Marathon: Dec 6**  
Amateur Radio support
- **Tucson Marathon: Dec 7**  
Amateur Radio support
- **Days in the Park: Dec 13**  
Randolph Park, Tucson  
Country Club and 22St corner of park  
9am-2pm
- **Christmas: Dec 25**

## DECEMBER

sun	mon	tue	wed	thu	fri	sat
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

Send Event and Calendar additions to  
[newsletter@eaars.com](mailto:newsletter@eaars.com)

## EAARS Badges

Club badges are now available, see:  
[www.eaars.com/newsletter/badges.htm](http://www.eaars.com/newsletter/badges.htm)  
For ordering information. Show your club colors!



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

# 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.

**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](http://www.eaars.com)