

December 20, 2021 LeeCARES Net Training:

Repeater Etiquette and Insights

Presented by Jason Korb, KI5ABB

KNW-163

Repeater Etiquette and Insights

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Technical repeater insights

Wait a second or two between keying up the repeater and starting to speak. It takes a few milliseconds for the repeater to decode the tone and make sure the tone is correct and then it keys the repeater. The beginning of your transmission will be cut off if you “quick key” the mic.

Don't kerchunk the repeater and assume you are hitting the repeater full quieting. Ask for a signal report.

Know your local repeaters. Have them pre-programmed into your radio.

Use the power required to have a good quality signal, not a marginal quality signal.

Make sure you have the transmitter time out set. This is the maximum amount of time you can talk on the repeater without rekeying the mic. This is essential to prevent stuck mic issues.

Make sure the APRS is turned off in your radio.

Your radio should be set for wide band FM not narrow band FM.

If you have a Yaesu radio, make sure the Yaesu X-WIRES is turned off. WIRES, Widecoverage Internet Repeater Enhancement System, is an internet communication system and will cut off a transmission for a second or two.

Be careful when using any type of crossbanding. Do not try to crossband from one repeater to another. This usually results in both machines kerchunking each other until one of them times out.

What you are hearing when you are listening to a repeater, is what is coming out of the repeater, not what is coming out of the station hitting the repeater.

It is important to know how to listen on the repeater input frequency. An example would be when the transmitting station does not have the proper tone set for the repeater.

As an example, if you are listening on the 147.000Mhz repeater, tone of 103.5

- You are talking on the input frequency of 147.600MHz
- And you are listening on the output frequency of 147.000Mhz
- To listen to the input of the repeater, you need to listen simplex on 147.600MHz. You'll then be listening in to the same signal the repeater is hearing.

Ignore malicious interference. If you hear malicious interference, it is helpful “go reverse” to listen on the repeater input frequency to help identify where the offender is located. Please send an email to the repeater trustee, or your EC, if you have information to assist our RDF (Radio Direction Finder) team.

When the repeater seems 'noisy', listen to the repeater output during the 'hang time' to distinguish whether the repeater is noisy to you or if the other station is noisy into the repeater.

Repeater etiquette

Be polite. No profanity. Keep your discussions family appropriate and not controversial.

Listen before you transmit.

Allow for breaks in your conversation so others may join in on the repeater usage.

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Say your callsign to join a conversation on a repeater. Do not say break, that is used for priority communications.

Acknowledge the incoming operator and allow them to pass their traffic.

Take a general rag chew discussion to a less used, more local repeater.

Clear the repeater for an emergency request by saying “break, break”.

Be respectful of scheduled Nets and clear the repeater when requested.

Maintain an awareness of repeater frequency and tone changes. When was the last time you updated your radio’s preprogrammed frequencies?

Give true and accurate signal reports. The recommended descriptions for the VHF / UHF bands signal reports are:

- Full quieting – little or no background noise, this is the strongest signal report
- Scratchy – some scratch or noise yet the transmission can be understood
- Flutter – the signal varies between strong and weak levels
- Unreadable – a signal can be detected yet not understood

Respond to a request for a radio check.

Speak clearly and loudly and directing into your microphone.

Don’t cough, clear your throat, or sneeze on the air. Remember to unkey your microphone first.

Do not talk about specific repeater locations. It’s okay to mention a particular repeater is in the NW, SW, or downtown area.

ID at least every 10 minutes.

Use ITU phonetics when needed.

Repeater trustees

Don’t be afraid to ask a question! Our repeater trustees are often on the air and monitoring.

The repeater trustee may ask for your location, power, antenna height, etc. to help to determine if the repeater range is comparable to what is expected. It also helps in watching for developing problems.

Request permission from the repeater trustee to hold a net or use a repeater for a Public Service Event prior to hosting the event.

Support your local repeater trustees. They have many expenses including equipment costs, equipment maintenance, and insurance.

Thank your repeater trustees when you hear them on the air.