

Editorial – Repeater operation terms

Many of us are acquainted with using a repeater, and are familiar with terms associated with repeater operation by amateurs. But, not everybody who's licensed knows them well, and there are some slang and other repeater-related phrases that are good to know. Here's a quick review of some of the more common ones you might encounter:

- A repeater has an **input frequency** and an **output frequency**. What you hear from the repeater is from its output frequency, and when you press the PTT, you're sending your signal to its input frequency. The difference between these two frequencies is called the **repeater offset**.
- To **open a repeater** means the repeater is able to hear you well enough to perform its repeat function. Typically, a repeater also requires a **repeater tone** to open the repeater.
- If a person is not able to **hit the repeater**, it means he's unable to open the repeater. So, **hitting the repeater** means the repeater can hear and acknowledge your transmission.
- If you're not **in the repeater**, it possibly means your radio is not set to the proper offset, or is on simplex to the repeater output frequency.
- When you hear somebody **on the repeater**, and there's no background noise or hiss in his audio, it means he's **full quieting into the repeater**.
- After you release your PTT at the end of your transmission into the repeater, you might hear a **courtesy tone**, which is often a beep, followed by a short, loud staticky sound, known as the **squelch tail**. Afterwards, you might hear the **repeater ID**, which is the repeater announcing its call sign, often in Morse code.



- While hearing somebody attempting to talk **through a repeater**, meaning he's trying to use the repeater, you might hear a syllable here and there, but maybe not a full sentence, because the signal keeps **cutting in and out**. We tend to say that he's not **holding the repeater**, meaning that the repeater is only occasionally hearing him.
- Sometimes, you might hear somebody who's **tying up the repeater**, meaning that he and a friend are talking on it so long that others who might want to use it have little chance to use it for themselves.
- A person can talk on the repeater so long that he might **time out the repeater**, which causes its **time-out timer** to disable the repeat function and **reset** or **reboot the repeater**.
- Excessive timeouts can cause the repeater to **go down**, until the **repeater trustee** can restore it to normal operation.
- Many repeaters are linked together by the internet or other means. We call that a **repeater system**, and the repeater you use to get onto that system is a **linked repeater**.
- Finally, there are times when you might want to communicate on the repeater output frequency, which operation is called **talk-around**, because you're talking around the repeater and not going through it. A similar operation takes place when you talk **on reverse**, meaning you send on the repeater output frequency and listen on the repeater input frequency, which is useful for listening to somebody who might be having a difficult time hitting the repeater.

Have we missed your favorite repeater term?

Anything to add? Email editor@utaharc.org

