

RTTY Contesting

The Art of RTTY Sprinting — Part 2

In my last column, which appeared in the May/June 2014 issue of *NCJ*, I described the RTTY Sprint works and how certain operating conventions have developed among regular participants as they cooperate to make more contacts more accurately. Now, let's conclude with some specifics."

Stored Messages

Here are the basic RTTY Sprint messages that allow you to operate within the secret conventions of Sprint contesting:

CQ: NA NØNI NØNI
CQ
Your Call Sign: NØNI
Run Exchange: <his call sign>
NØNI <serial
number> TONI IA
S&P Exchange: <his call sign>
<serial number>
TONI IA NØNI
Run QSL: TU

Other message attributes are the same as for other RTTY contests. Depending on the specific logging software, a control parameter may be needed at the beginning of each message to initiate PTT and transmission as well as at the end to drop PTT and cease transmitting. Always start a message with a CR/LF (carriage return/line feed) character, so that your message appears on a new line on the screen of the receiving station. End each message with a space character to separate any follow-on noise-generated characters from your message. As an option, you may include a message parameter for clearing RIT, eg, in the CQ and Run QSL messages, or for logging the QSO, eg, in the S&P Exchange message.

Note that the "Your Call Sign" message only contains one instance of the call sign. This is an example of modular messaging, in which one message can be customized dynamically into one, two, or three instances of your call sign. In this particular message you may choose not to include the CR/LF, so that multiple instances of your call sign will all appear on the same line separated by space characters.

Additional messages are needed for efficiently repeating exchange information when something is missed:

Serial Number: NR?
Name: NAME?
QTH: QTH?
My Serial Number: <serial number>

My Name: TONI
My QTH: IA
General Repeat: AGN

Each of these messages contains only one instance of the information, so that the message key can be tapped more than once to create the number of instances appropriate for the given situation.

While seldom used, these messages are extremely important when required. Without them, the operator must send the entire exchange again which is unnecessary, time-consuming, and often results in the needed information being missed a second time. In QRM, QRN, or QSB, communication is much more reliable if only the information requested is sent an appropriate number of repeats called for by conditions.

SO2R and SO2V

Experienced RTTY Sprint operators often use two radios to interleave contacts on two different bands. When executed effectively, this can increase your rate by paralleling QSOs, just as in any other contest. As expected, though, SO2R in a Sprint is a bit more challenging, just as the Sprint itself is more challenging than most other contests.

Similarly, SO2V can increase your rate, but not as much as SO2R can. With SO2V, the operator must have a second full receiver in their radio, which they can use to monitor a second frequency on the same band. With efficient coordination between the logging program and radio, the operator can instantly move their transmit frequency between the two received frequencies to more quickly transition between contacts. It is also possible, though very difficult, to interleave QSOs on the same band with this method. Most people should not try this!

A third variant on these advanced techniques, is the use of VFO B to instantly shift between two frequencies on the same band while satisfying the 1 or 5 kHz QSY rule. The key advantage of using both VFOs is that it makes it simpler to manage the QSY rule frequency-change requirements. Depending on the radio's features and station configuration, the two VFOs may even be on different bands.

I'll save additional details about these more advanced practices for a future discussion.

Other Tips

How many times should you send your

call sign in response to another station's CQ or completion of a prior QSO? Well, as W6SX discussed in the November/December 2013 "RTTY Contesting" column, "It depends." Just as in other contests and other modes, you need to judge the chance that one instance of a call sign transmission will be clearly received by the other station. If there is QRM, a weak signal, other stations calling, the prior station off-frequency, etc, then a second or even third instance of your call sign may be appropriate. More often, though, RTTY contest participants send their call signs *too* many times.

A related tip is to always send your call sign only once and then listen briefly to determine if a repeat might be useful. This allows you to dynamically determine how many times to send your call sign, as well as to time your transmissions to coincide with lulls on the frequency. In general, RTTY mode will more often require multiple instances of your call sign than CW or SSB. Machine decoding, especially when dealing with a non-zero-beat signal, is still not as good and quick as the human brain.

When a station operates outside of these unofficial Sprint conventions, rejoice! A new participant may have wandered into the RTTY Sprint, and this offers the opportunity to add another contact or two to the log. There may be a decrease in our QSO rate when working a station that is unfamiliar with conventional Sprint practices, but consider this a "sound" investment the RTTY Sprint's future. We can increase the probability that newcomers will return when they feel welcome and have a good time.

Are savvy RTTY Sprinters just born that way? Hardly! Everyone was a newcomer once, and then they practiced a lot! There are six Sprints each year, two for each mode, about 6 months apart. So, there are six opportunities to practice Sprinting and two opportunities to hone our RTTY Sprint skills. *But, wait!* Every Thursday evening, NCCC hosts 30 minute Sprint practices in both CW and RTTY. (Prior to each SSB Sprint, there is also a SSB Sprint practice.) Thus, for an investment of 30 minutes a week, you can build your RTTY Sprint skills while having a blast with the world's most unique and fun contest.

I look forward to working a growing number of call signs every Thursday in the NCCC Sprint practices and in the next official RTTY Sprint on October 12.