

The RST Reporting System

While roaming around the upper part of the 40 meter Ham Band in the LSB MODE, I recently overheard a conversation between a roundtable group. I listened for a few moments and then heard one of the Hams who was most likely new to Ham Radio, ask one of the others in the group to give him a signal report.

The report he got back from the other station was, "You're 59". Silence was heard for a few moments and then the "new" ham said, "I did not want you to guess my age....how do you hear me?"

The reply was again, "You're 59". "What do you mean?" The new Ham said.

Then another station in the roundtable began a very lengthy dissertation to try to explain the RST reporting method to him that *no one could have understood!* He started talking about power levels, dB's, S meters, propagation, antenna theory, brand names, receiver sensitivity and on and on for a good five minutes! When the new ham started to ask questions, another station spoke up and totally confused the situation even more! Then another station started with his 'two cents" worth. After a couple more questions with no clear answers.....The new ham finally said "I still don't understand how well you are hearing me.....I hear the phone ringing....got to go!", and he signed off. He sounded very disgusted to me when he left the air abruptly!

In my opinion, in answering his question...."How do you hear me?"....it would have been much better in this case to just say "loud and clear" since the new ham had obviously not studied the RST system of signal reporting and none of the roundtable station operators could explain RST to him in simple terms....they just seemed to want to dazzle him with as much "info" as possible! It seemed to me that they were trying to help in their own way, but did not want to admit their lack of a "good" explanation. They could have suggested that he study the RST reporting system on the internet or wherever he could find the information.

To help the "New" hams and lots of you old timers who know nothing about giving or receiving signal reports using the RST method...read on!

THE RST REPORTING SYSTEM IN A NUTSHELL!

RST Reports: An RST report is a report from a receiving station on the quality and strength of the transmitted signal. Using shorthand in the form of numbers to represent the tone of a CW signal or voice transmission of a transmitting station's signal at the receiving station's location (QTH).

Here is what it means:

R Readability - Understanding what is said and how well. On a scale of 1 to 5, the readability of your signal with a "5" being perfect with no difficulty. In other words the ability of the other operator to understand what you are saying. A "1" is unreadable....a "5" is perfectly readable.

S Strength - On a scale of 1 to 9, indicates how strong your stations signal is. A "1" is a very faint signal. A "9" is an extremely strong signal.

T Tone - Used for morse code signal reports. Indicates on a scale of 1 to 9 the quality of the tone of the morse code "dits and dahs". From a "60 cycle harsh tone" a (1).... To a "very pure tone", a (9).

Example #1 A CW REPORT: If you got a report of "599" on CW, it means the following:

The five means your signal is very easy to understand with absolutely no difficulty. The first nine means your signal registers a very strong reading on your S meter, usually 3/4 scale or more. The second nine means your CW tone has a nice pure clear tone or sound.

Example #2 A VOICE REPORT: If you get a 5 5 (sometimes said 5 by 5)....Your signal is perfectly readable with a fairly good signal strength.

In some cases people may tell you: your signal is five nine plus twenty dB... In this case the twenty db part indicates that your signal is so strong that it goes off the standard 1 through 9 signal strength S meter dial by twenty decibels as indicated on the meter readout. (See note below)This would mean that you are putting out a REALLY strong signal!

NOTE:

The RST System of Signal Reporting was established roughly in 1934 as a quick method of reporting **R**eadability, **S**ignal Strength and the **T**one of CW. For voice contacts only the "R" and "S" are used. The "S" component is usually not the same as your S-Meter reading as *most S-Meters aren't calibrated to track the RST System*. The RST is also reported on QSL Cards and must be filled in correctly. For example a "569" report for a **voice** contact is NOT valid. Note that many DX operations and contest stations merely report "599" as a convenience to avoid having to log each of the real reports. This is a questionable practice but is used most of the time in DX'ing/Contesting.

Would you give a 599 for a station you could barely hear? Would you appreciate it if this was your report from someone that could barely hear you? Be honest with your reports!

The RST report system works well, can be used for troubleshooting problems with your station and has been used by Hams worldwide for many years and also is used by the military with slight modifications in their reporting of transmissions.

There is a great deal of "averaging all factors" when giving a signal report to another station.

There is a lot of difference between a voice report of 59 and one of 52.....but the most important thing to me would be readability! I have heard hundreds of stations perfectly clear on voice and CW that were not moving the S Meter! (Yes...it does work!) So their report might have been an R5, S1 or 2.....to my ears!.....

Study this information below to help you with giving out accurate reports.

Feel free to copy any or all of this information if it would be helpful to you!

R = READABILITY

- 1 -- Unreadable
- 2 -- Barely readable, occasional words distinguishable
- 3 -- Readable with considerable difficulty
- 4 -- Readable with practically no difficulty
- 5 -- Perfectly readable

S = SIGNAL STRENGTH

- 1 -- Faint signals, barely perceptible
- 2 -- Very weak signals
- 3 -- Weak signals
- 4 -- Fair signals
- 5 -- Fairly good signals
- 6 -- Good signals
- 7 -- Moderately strong signals
- 8 -- Strong signals
- 9 -- Extremely strong signals

T = TONE

- 1 -- Sixty cycle a.c. or less, very rough and broad
- 2 -- Very rough a.c. , very harsh and broad
- 3 -- Rough a.c. tone, rectified but not filtered
- 4 -- Rough note, some trace of filtering
- 5 -- Filtered rectified a.c. but strongly ripple-modulated
- 6 -- Filtered tone, definite trace of ripple modulation
- 7 -- Near pure tone, trace of ripple modulation
- 8 -- Near perfect tone, slight trace of modulation
- 9 -- Perfect tone, no trace of ripple or modulation of any kind