



creased manmade interference, FM, extremely sensitive rigs etc., — and the 'S-Meter'. From the definitions of the RS code you will see that it is a purely subjective code, based on what your ears receive, and was never intended to be equated to an electrical equivalent. When someone gives you a report of 59 what does he mean?

If it is in a contest, then you are probably 32, not 59, but then everyone gives 59 during contests, so you would ignore this report anyway (it goes "you are 59 old man, please repeat my report and serial number, and I need your prefix...").

Is he using an S-Meter for your report? If so, then it still doesn't mean very much, even if he tells you that his rig is calibrated to the accepted standard (which one?). Varying receiver sensitivity makes a nonsense of such calibration. If you take two receivers of varying sensitivity but calibrated to the same standard for S9, then any given voltage signal will produce the same S-Meter reading on both. However, the less sensitive receiver will yield an inferior report if you use the RS system for an audible report. So using the S-Meter doesn't tell the transmitting station what the signal coming out of the speaker is like. At the extreme, if the receiver is very insensitive then you could be barely audible but S9!

An even better example is FM. The average modern transceiver

can provide a near fully quietened receiver for under 1uV of signal. On an audio report you would be S8 or 9 using the RS standards. You will be lucky if the S-Meter has even moved off the stop (or lit a cherry with the new rigs), so you would then be justified (but foolish) in giving a report from the meter of S0 or S1!

The S-Meter is useful for comparative reports i.e., "you are stronger or weaker", but be careful when saying that the signal has increased by 1 S-point unless you know what you mean. If the other station takes this at face value then he will assume that his signal has increased by 6dB (which is the accepted standard for an S-point), or equivalent to an increase in his transmitted power of 4 times (3dB for power doubling — 6dB for voltage doubling). Almost certainly, you will find that the steps between

the calibrated "S-divisions" on your meter are not 6dB, and may be anything from 3-20dB, and varying across the scale — some examples are given of S-Meter calibrations taken from reviews (the rigs remain anonymous). If you feel so inclined, spend some time actually checking your rig with a calibrated and correctly terminated signal generator.

Several solutions have been proposed, my own is to ignore S-Meters and go back to subjective reports using a simplified reporting system put forward some time ago by UA1IG which removes some of the intermediate steps in the existing 9-point scale. Any other suggestions?

Next month we will have a look at the subject of polarisation and VHF signals, and hopefully answer a few of your questions.

UA1IG S-Meter Scale

- S1. Very weak signal; impossible reception
- S2. Weak signal; reception with strained reception
- S3. Satisfactory signal; reception without particular strain
- S4. Good signal; reception without strain
- S5. Loud signal; loudspeaker reception

Signal Strength (as in standard RS code)

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.