



UK Six Metre Group Spectrum Forum Report 2021

The Band

In the early days of six metres, it was generally thought that the 'magic' of the band only happened at the peak of the sunspot cycle, so activity tended to drop off outside that period. This was the view because the high 'F2' region of the ionosphere, which supports most of the DX worked on 14 MHz and above, is only dense enough to reflect 50 MHz waves when solar activity is near the peak. Over the last 20 or 30 years we've learned that multi-hop sporadic-E (Es) is also capable of supporting very long-haul contacts, and indeed this year there have been many spectacular Es QSOs made from the UK, including to KL7 and VK.

But F2 definitely adds an extra level excitement, and in years to come, we can hope to use F2 to work strong signals (and weak ones) from all over the world on six metres. This year there have already been many contacts made by a form of F2, Trans Equatorial Propagation (TEP), between North and South America, Japan and Australia, and Southern Europe and South Africa. There are exciting times to come for everyone interested in six metres.

The Group

Founded in 1982, UKSMG is the leading dedicated group for six metre operators world-wide. The group takes a pro-active role in fostering the global six-metre community by promoting activity on the band and working to enhance the enjoyment of operators by publishing its quarterly journal Six News, providing a comprehensive website including the UKSMG DX Desktop, sponsoring beacons, and supporting activity from remote and rare locations.

Membership is stable and UKSMG funds are strong. The Group has chosen to increase sponsorship expenditure this year, providing financial and other assistance to current and potential six-metre operators in 5Z, 3DA, AP and 5V, plus helping to fund the newly reinstated GB3RMK beacon in the north of Scotland, and making its regular donation to the ON4KST chat website.

The Group also organises three contests each year. The advent of FT8 has led to a continuing increase in activity and enthusiasm for the band, but we also want to promote non-digital activity. For that reason, our Summer Contest, held every year on the first full weekend in June, is and will remain 'legacy mode' only. In addition, this year we decided to split our popular Winter and Summer Marathon events into separate 'digital' and 'legacy' sections. Both sections of the Summer Marathon attracted a good number of entries, from all over the world.

WSJT Robots

Like it or not, 50MHz operation is now heavily dominated by digital modes, because they are so effective on a band where working weak and short-lived openings is the norm. But there is an unfortunate side effect, the advent of QSO robots: modified versions of Joe Taylor's WSJT software which allow contacts to be made completely automatically, with no operator intervention at all. They either sit and call CQ all day, or (worse) they search and pounce for wanted call signs, countries or grid squares, which is quite a good way of building up a good score.



They are not (yet) common, but in the light of information received, we recently made the following announcement on our website and elsewhere:

“It has come to our attention that some operators have been using ‘robot’ software to gain advantage in our Marathon contests. Although the current rules do not specifically prohibit this operating method, the UKSMG Committee would like to state very clearly that such activity is contrary to the spirit of the contest and is fundamentally unfair to the other participants. The rules for future events will be amended to prohibit robot operation, but in the meantime, we would ask that any operator using a robot should reconsider their participation in the Summer Marathon.”

Why are we making such a fuss about robots, when there are plenty of other ways of cheating? It is this: the biggest single factor which determines success on six metres is being in the right place, at the right time. To get it right requires a bit of propagation knowledge and a lot of persistence. Robots threaten to completely undermine that, because, effectively, they allow an operator to be on the band 24 x 7 without even being on the premises. That’s why we think it’s unfair, particularly in a contest and that is where we draw the line. We suggest that the RSGB CC should also consider introducing such a rule, for its MGM contests.

EMC

RSGB has done a lot of excellent work in the interference/noise floor area, especially on the lower HF bands, but somehow 50MHz and 70MHz seem to get less attention. 50MHz operators can suffer just as egregiously as others do on HF, although the interference sources may be different. Perhaps a larger proportion of six metre operators have beams, and of course this can help if the noise is from a relatively small number of sources, but for many EMI is a major problem and it has already driven some operators from the band. We’d like to request a little more focus on the low VHF bands, please.

Spectrum Enhancement

A long-held desire among the 50MHz community is to have additional allocations in the low VHF region, specifically at 40MHz and 60MHz, for experimentation, and the study of radio propagation. For a number of years, the GB3RAL beacon was operating on 28/40/50/60/70 MHz but unfortunately that has been off the air for some time because of local EMC issues at RAL. We fondly hope that GB3RAL will reappear from a new location at some point, with the full beacon cluster intact. We know that RSGB PSC is working in that direction, but there has been little tangible progress so far.

More recently, a number of the smaller states in IARU Region 1 (including EI, S5, 9A, ZS), and also the USA, have released experimental and/or general licences to amateurs at 40MHz and/or 60MHz. We recognise that OFCOM have expressed little interest in adding additional amateur privileges following WRC 19, but at the same time we strongly request that RSGB keeps this issue on the ‘wish list’ for the future, because its importance to amateurs focused on the low VHF range.

Chris Deacon, G4IFX (Chairman)
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