AFS CW 2024 Briefing Note

For those new to contesting, AFS is a great introduction to the contest subculture: there are a few, mostly common-sense, rules, and little choice of bands. There are no multipliers, and every QSO earns a single point. Simple. Additionally, the short duration (four hours) makes it not overly taxing for the operator and, for those used to 48-hour events, this contest will be nearly over as soon as it starts.

That said, you will still have to give some thought to strategy, especially regarding band selection. In essence, that means knowing when to concentrate on either of the two permitted bands: 40 metres and 80 metres. Back in the dark days of solar minimum, the decision was pretty much made for you, given that much of the UK would be the 40-metre skip zone for the duration of the contest. Only stations within reach of the ground wave plus those in far-flung Scottish or continental locales would be gettable on 40. So, supergluing the band selector to 80 metres would not necessarily make you uncompetitive.

Yes, the sunspot situation has definitely improved in the intervening years, with near vertical incidence skywave (NVIS) propagation on 7MHz available once more to UK operators in *most* hours of daylight. I stressed 'most,' as this contest (and the remaining two AFS events) stretch late into the winter afternoon, when ionisation drops to the point where short-range skywave propagation on 40m is no longer facilitated. Depending on the vagaries of the ionosphere's F layer, this could be as early as 1500UTC – only half way through the contest.

Data from the Reverse Beacon Network (RBN) during AFS CW 2023 show a clear tendency of G (i.e. England) stations to be substantially more active on 40m before 1500UTC than afterwards. A summary of the RBN data for that contest is in the table and graph below, which highlight the number of distinct England stations and Scotland stations that were identified as calling CQ ('running') during each of the eight half-hour blocks making up the event's four component hours. [Conditional formatting highlights the respective highest (orange/ red), middle (yellow) and lowest values (green) for each of the columns.]

You can see the England stations concentrating on 40m before 1500UTC, while switching to 80m in large numbers afterwards. Given that most intra-G contacts would be short range, this pattern closely follows the maximum NVIS frequency, which approaches (and subsequently falls below) 7MHz after 1500UTC. Note that the GM stations – with their substantial distance from big English population centres – persisted on 40m for a further hour.

Propagation conditions for this year's contest should be very similar to those of 2023, so the patterns shown below ought to be replicated, petty much. The information presented below is probably most helpful for those searching & pouncing (i.e. responding to CQ-calling stations) than for those running, given that only CQ callers can be detected by the RBN. For runners, perhaps the best opportunities are during the 'orange' periods, when plenty of folks are on the band, but not 'everyone' is calling CQ, as during the peak ('red') times. A good segment in which to run, I suspect will be in 1430-1500UTC, on 40m, as stations that have been calling CQ for much of the early afternoon seek to 'mop up' other runners, before moving to 80m.

Number of CQ-calling stations from G and GM regions detected during each half-hour block in AFS CW 2023

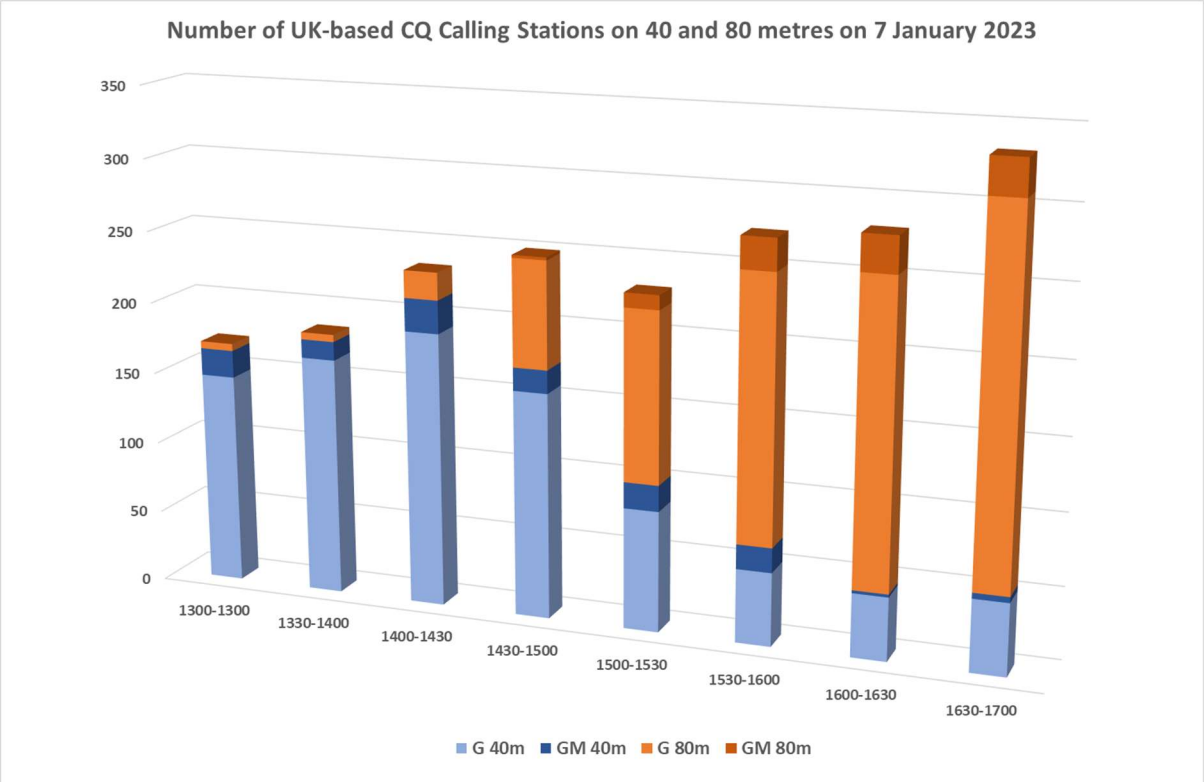
AFS CW 2023	G* 40m	GM** 40m	G* 80m	GM** 80m	Max. NVIS Freq (MHz)
1300-1330	147	19	5	0	***9.2***
1330-1400	166	13	5	0	***10.0***
1400-1430	191	23	19	0	***9.1***
1430-1500	157	16	74	2	***8.9***
1500-1530	84	18	118	10	***7.2***
1530-1600	51	17	183	22	***7.3***
1600-1630	44	2	209	25	***6.0***
1630-1700	50	4	254	25	***6.3***

*'G' here relates to England (G) + Wales (GW) + Crown Dependencies (GD, GJ, GU). GW and CDs accounted for only a handful of detected stations, and, so, are not given their own designation here.

**'GM' here is for Scotland (GM) + NI (GI) (No NI station was detected during the event.)

The numbers quoted above are exaggerated, perhaps by as much as 20%, due to the RBN errors (eg. 'detecting' 'G3PY' as well as 'G3PYE'). However, the relative 'busyness' of the time blocks should be accurate.

NVIS information from Propquest



Good luck to everyone participating.

73

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