



VHF Contest Committee announcement and FAQ

After careful analysis of all your contributions, the VHF Contest Committee has made a number of decisions on rule changes for VHF contests in 2017.

We'd like to thank you all for the time and thought that you have put into your contributions and to the wider discussions. The fact that we received nearly 450 responses to the VHF Contest survey is remarkable and demonstrates the high level of interest in how our rules are set. Every station who has submitted a VHF contest entry this year or has previously registered for newsletters was individually e-mailed to take part.

Major changes are as follows:

- We will introduce a series of awards for the leading stations aged 18 or under to encourage more young operators to try, and hopefully stay with contesting
- We are increasing the power limits for the two sections of the Backpackers contests from 3W and 10W to 5W and 25W
- We are introducing new short low power FM contests aimed at newcomers on 4m, 2m and 70cm which will run in the hour prior to the UKAC events (1900 – 2000) on those bands
- We are re-introducing the 2m diameter limitation for dish and backfire antennas in the Restricted and Low Power section of the 23cm UKAC contests
- We are introducing separate Local and National club sections to the UKAC Club Competitions defined in a similar way to the successful 80m CC sections.
- The 4m UKAC contests will move to occur every 3rd THURSDAY of the month to allow them to happen every month, and the 4m Cumulatives will be removed from the calendar
- The 6m UKAC contests will move to occur every 2nd THURSDAY to separate them from the SHF events
- In VHF NFD it will be possible for stations in both the Mix and Match and Restricted sections to operate on up to five bands, but have only their best 4 bands count
- With the aim of increasing weekend activity, we are introducing a new Club section to the VHF Championship for weekend contests. In this section, the scores from every individual entry to a contest from a club's members will count towards an overall score for the club

UKAC Scoring

Most of you will be aware that, as part of the Presidential Review of Contesting launched in 2015, we have spent a large part of the past 2 years looking closely at scoring systems for the UKAC contests. The culmination of hundreds of hours of analysis and debate has been the proposal of two new scoring systems, B2 and M8 which attempt to make the scoring in UKACs fairer by compensating for the number of active stations available for contestants in different parts of the UK. These mechanisms have been extensively described and tested in a number of public documents over the past six weeks and the responses to these captured within the VHFCC contest survey.



On the specific survey question around UKAC scoring systems, we received over 400 responses to the question of whether a change to the current UKAC scoring system was supported, with those expressing an opinion voting 58% vs. 42% in favour of making a change from the current M7 scheme.

The question asking whether M8 or B2 was preferred was too close to call, with B2 being slightly ahead at 52% vs. 48%. With this close result, the fact that B2 seemed, by a large margin, the fairer of the two systems (as shown on pages 23 – 37 of the original [report](#)) across both the whole of the UK and across the most active parts of the UK, means that we have chosen to pursue B2.

The B2 scoring system is a simplified, optimised and much more carefully tested variant of the B1 proposal which was only narrowly rejected in the 2015 consultation.

The B2 proposal has only a small impact to the positions of stations in the more highly populated areas, but significantly improves the positions of those stations who are most dis-advantaged by the current distribution of activity.

In spite of this clear majority for change, this has been a difficult decision for the committee to make. There has been a significant vocal opposition from some contesters to this proposed change. Rather than do nothing, we have decided to try B2 for an experimental period in order to generate real data on its use, and we would encourage all to try the new rules for one year. In that light, we will review the position for contests in 2018, and we would expect to have sufficient data to start that process from around the middle of 2017. This review will include a re-run of the analysis which generated the proposal against 2017 logs and a re-survey on the preferred scoring mechanism for UKAC contests for 2018 following the experience of 2017.

The extended debate around UKAC scoring has put us behind our planned schedule, but we will publish the final rule wording over the next weeks.

FAQ on UKAC Scoring Consultation

This document is intended to be read in conjunction with the analysis of scoring proposals at <http://www.rsgbcc.org/hf/information/Scoring-Review-Output-Issue-1.pdf> and the announcement of the outcome of the consultation above.

1. Why was this consultation being carried out?

This is being carried out as a result of an RSGB Presidential Review of Contesting which started in 2015. This review resulted in a number of actions to try and make contesting healthier in the UK, including the formation of the new committee structure, release of open logs, and some rule changes. The major VHF issue which was not resolved successfully during 2015 was a full review of the scoring systems for the UKAC contests to provide a scoring system which has no discrimination across the whole of the UK. This consultation attempts to close off that point.

2. What is the aim of the proposed scoring systems?

To develop a scoring system which

- Will be recognised as fair by the vast majority of entrants across a wide geography
- Is straightforward enough to be easily understood and explained (and coded)
- Works for all bands from 6m through 23cm
- Works for all sections

This study aims to compensate for the fact that some places have lots of activity in the UKAC contests and some have very little and this means that some stations have access to a bigger pool of stations in range than others.

At the same time as making things better for those who have the toughest time, the new scoring systems are designed and tested to have minimal effect on the remainder of the country. They will not change the features that have made the VHF/UHF UKACs a success.

3. What's the point in doing this? No contests are ever fair!

The final aim of this study is to make something which is fairer across the whole UK. Fair representation and delivery of services across the UK is a key issue for RSGB. The **only** way in which we are aiming for a fairer scoring system is to compensate for the large differences in **numbers of available stations** that exist across the UK as a whole. We are specifically **not** trying to do anything about other geographical factors such as sites and propagation (we have not found a reliable way of doing this with the granularity of public domain terrain data), and certainly not to handicap anyone based on station equipment or operating techniques.

The analysis has shown us that we can make the scoring system fairer across the whole country than it is right now, so the real question is: why should we **not** do that?

4. What's new about this study?

This study is evidence-based. It uses actual logs from all stations in events from January to August 2016 to figure out what scores could be made from all UK Locator squares. The impact of different scoring systems has been tested carefully to make sure that it has the expected effect.

The fact that this study uses real data and logs makes it unique in the history of RSGB contest rule-making.

5. This survey was triggered in part to address complaints from Scotland, Northern Ireland and the North of England about some existing scoring systems being unfair to them. I see stations from these parts of the UK doing well however. Does this not just make things even better for them?

Two points here:

1. It is wrong to focus just on the leading stations because they are not what UKACs are actually about. The UKACs are mainly club-based contests in which everyone should feel able to make a contribution. That is why the focus of our analyses has not been on 'who wins', but on how well stations at all levels are able to contribute to the scores of their own respective clubs. (As for the leading stations, our detailed analyses have once again verified that well-known saying that the same stations will probably do well under any scoring system. Also the existing UKAC normalisation system was specifically designed to remove the effects of any 'runaway scores' by leading stations.)

2. Although many complaints came from the north and west of the UK, the study showed that in fact northern England was not badly disadvantaged by the M5 and M7 scoring systems. The people who really have a hard time in VHF contests are the stations in Central and Northern Scotland – partly for reasons of terrain (which we did **not** address) but also for the simple lack of surrounding stations to work. The two proposed scoring systems do not significantly help stations in the far South of Scotland, but really do help the stations in the Central Belt and the North of Scotland... which in turn encourages them to get involved and improve their stations.

6. How do we know that these scoring systems will not fundamentally change the contest results?

We have tested the proposed scoring systems against last year's logs as shown by example in the paper, and the position changes across the majority of the UK are small. The biggest predicted impacts are in the low population areas – which is exactly what was intended.

7. How do we know that stations will not change the way in which they operate and so skew the results badly with the proposed scoring systems?

We can never be certain of what will happen as a result of introducing new rules, but UKACs are heavily time-limited, leaving fewer opportunities for entrants to change their overall strategies. While the most successful stations in the contest will have their own favoured strategy to optimise their scores in the limited time available, the only strategy open to the majority of entrants will continue to just try and work everyone who they hear, so overall the changes in behaviour are expected to be small.

8. Why are the non UK squares scored at 1000 points rather than 500 points?

Largely because of the relatively lower level of non-UK activity. When we tested different scoring systems, the scores from all UK squares were closer together (and hence the scoring system was fairer) with non-UK scored at 1000 points rather than 500 points

9. Why don't the rarer squares of JO00 and JO03 count for more than 500 points?

Making JO00 and JO03 count 1000 points makes a very marginal decrease in the overall fairness score, but not enough to be significant.

10. Does the B2 mechanism have a bigger negative impact on stations lower in the table?

We have run the B2 scoring algorithm against all real UKAC logs for 2016 for all bands, contest sections and large squares to determine the impact compared to the existing M7 scheme. We've repeated that analysis for the whole of the results tables, and the lower half of the results tables. There is no evidence of any negative effect to stations in the lower half of the results tables. We have also repeated that analysis for all foundation station entrants and similarly found no negative effect. This data is at http://www.rsgbcc.org/hf/information/Additional_Data_Issue1.pdf

11. Your analysis talks about averages. It ignores the impact on individual stations, some of whom will move substantially in the table. Averages are irrelevant and misleading.

We believe that looking at averages in a square rather than individual stations is essential. Some individuals will always move up and some down when a scoring system is changed based on their own operating techniques, take-off etc. – this is inevitable. The only measure of true fairness and impact is the average movement within an area (square in this case). The average movement in almost all high activity squares is 3% or less. It is also important to note that M7 is not a perfectly fair baseline to start from.

12. The B2 proposal looks just like a minor re-hash of the B1 proposal from last year which was rejected.

It is true that B2 is based on last year's proposal, but only because that proposal continued to perform well in the much more rigorous 2016 analyses. We tested lots of other options and found this B2 variant to be the fairest. There is a lot more detail on what's different between the 2015 and 2016 proposals on page 21 of the main report.

13. B2 appears to be a very radical and new proposal.

As part of the 2015 Consultation exercise, a similar proposal known as B1 was made. This was extensively discussed in public for a long period of time, and was only very narrowly rejected for implementation last year through the consultation exercise. This was because of concerns raised around corner cases and a concern that there had been insufficient analysis on the real impacts of the change. B2 is a simplified version of that proposal which has undergone a much higher level of well documented public scrutiny. B2 is not a new and radical proposal for this year

14. What other options did you look at?

We looked at:

- M5
- M7
- 1 pt/km
- M7 with variable multipliers by part of the country
- Options for working some of the multipliers or bonuses more than once
- Higher bonuses to all rare squares (e.g. JO00, JO03, IO70 – 73, IN79 etc.)
- Variations in the boundaries and score ratios for B2 and M8
- A flat bonus scheme with all squares attracting the same bonus value
- Combinations of the options listed above

These were all rejected in favour of the B2 option because that was the fairest scheme, with M8 being the fairest multiplier scheme.

15. Why haven't you included 1 point / km as an option?

1 point / km was looked at in some detail in the study. In terms of fairness, viewed across the whole county, it looks slightly fairer than M5 and M7, but is significantly less fair than M5 and M7 in more active squares. This means that it would cause some disruption and loss of fairness across the most active areas in the contest. But importantly both M8 and particularly B2 are significantly fairer proposals than 1 pt/km so we saw no good reason to offer it as an alternative.

We also believe that the use of multipliers or bonuses adds a piece of strategy and interest to the contest which is popular with entrants. It also promotes people moving their beams around to catch as many bonuses / multipliers as possible making sure that there is good activity heard everywhere.

There is one exception to this. We are proposing 1 point/km for the SHF UKACs because on those bands with small numbers of QSOs and short ranges, both bonuses or multipliers are too sensitive to very local concentrations of activity.

16. I'm in the South West of England – this proposal means no-one will beam my way.

The presence of a bonus or multiplier scheme means that stations need to beam in ALL directions to maximise their score, just as they have to do now under M7. Analysis has shown that the average position movement between M7 and B2 in any active square (one which attracted more than 20 active stations in the logs to Oct 2016) is 3% or less.

17. Is this analysis based on the work of the vhf.dx.scot group?

It's worth noting that the vhf.dx.scot analysis is based on population density rather than activity density and so tends to over-estimate activity levels in Europe and in London in particular. That analysis has played no part in our work whatsoever. The genesis of the B2 proposal was the B1 proposal made last year. This has only been used after being extensively tested for relative fairness (both across the whole UK and in the most active areas) against a wide variety of other options as described in the FAQ.

18. This scoring system will become completely null and void during Sporadic E and Auroral openings

All scoring systems are impacted during these events, and it is the intensity and location of the propagation peaks which determine success during such openings. Although Sporadic E can be expected to significantly impact a small number of primarily summertime contests on 6m and perhaps 4m, the occurrence of significant effects from such propagation in the UKACs is very low.

19. Why have you selected option B2 over option M8?

Both systems use the same 'blue-green-red' squares map to apply either bonuses or multipliers in a more selective way. The survey results were very evenly spread across B2 and M8. Given that situation, and as demonstrated on pages 23 – 37 of the original [report](#) the fact that the analysis showed that B2 would give fairer results than M8, we have chosen to implement B2.

Another advantage of B2 is that an additive bonus system tends to reduce the spread in scores between the top and bottom of the results table. Multiplier systems often give a spread of over 1000:1, which can look very discouraging to new entrants near the bottom of the table.

(Normalisation takes care of that, eventually, but new entrants are much less likely to be aware of that subtlety.)



20. Now we have change the scoring system again, will we then have a period of some years of stability?

We would like to keep stability, but, particularly given the strong opposition to this change from some stations, we will review the position on rules for the 2018 events. We would expect to have sufficient data to start that process from around the middle of the year. This review will include a re-run of the analysis which generated the proposal against 2017 logs and a re-survey on the preferred scoring mechanism for UKAC contests for 2018 following the experience of 2017.