

Contesting



PHOTO 1: K3LR's antennas for CQWW DX CW 2023.



PHOTO 2: K3LR team operating in CQWW DX CW 2023.

Many thanks to Chris Tran, GM3WOJ who has authored the Contesting column for the past couple of years.

We have enjoyed Chris' unique style, like his advice to SSB contesters "don't say anything at all that is not needed for completion of the contact (QSO) – not one single word!"

Future plans for the *RadCom Contesting* column

For the next period we have planned a schedule of topics, such as might form the chapters of a book on contesting. Some will be written by members of the three contesting committees, some by others who can share their experiences. We have published a list of topics on the RSGB website [1] – not necessarily in the order in which they will appear. If you would like to suggest a missing topic, or would like to write an article, please get in touch using the contact details below.

For this first article, Tim Duffy, K3LR has kindly agreed for us to use some images (Photos 1, 2 and 3) from his contesting station [2].

What is contesting and how does it work?

Radio contesting is an exciting, sometimes all-consuming, competitive activity for radio amateurs. For its devotees, contesting is the zenith of amateur radio activity. Our aim in this series of articles is to help you, the reader, to understand contesting and contesters and, in the process, to equip you to participate as much or as little as you might wish. Mostly we want you to experience the fun of contesting.

In contesting, an amateur radio station, which may be operated by an individual or a team, competes with other stations to obtain as high a score as can be achieved, usually by making as many contacts (QSOs) as possible in a given time and exchanging information in each QSO as set out by the rules of the event.

Scoring may include bonus points for particular QSOs and multipliers based on particular criteria, such as countries worked, and additional points for contacts outside the entrant's country, zone (group of countries) or continent. These scoring systems mean that strategy becomes critical to success.

Some QSOs will be with others who are entering, others with friendly 'passers-by'. Most contests are adjudicated by a sponsoring body, such as the RSGB. A log is submitted for adjudication as a computer data file which is compared, using software tools, with logs from other entrants, to ensure that the information logged for each QSO was consistent with what was sent by the other party, before a final score is calculated.

Why take part in contesting?

There may be as many answers to this question as there are amateur radio contesters, but some of the key answers are:

- **To compete against others:** aiming to achieve the highest score in a particular category. Radio contests are competitions and winning or coming high in a results table is very satisfying.
- **To compete against yourself:** aiming to produce a better score compared with a previous entry in the same event.
- **To collect QSOs required for awards:** contests are great opportunities to collect the contacts needed for award programs such as DX Century Club (DXCC), Worked All States (WAS) or Islands on the Air (IOTA). Rarer entities are commonly activated in contests and contesters are likely to provide the QSO verification required for award applications.
- **To represent your radio club:** in the UK there are many opportunities to participate as a member of a local or national radio club, so that your score can contribute to a team score.
- **To enjoy participation:** taking part is great fun. This might include making rare QSOs, experiencing busy pile-ups (so many callers sometimes that it is hard to pick one out), achieving a high QSO rate or simply making a lot of QSOs in a relatively-short time.

Keen contesters often are also DXers – those who love to exploit propagation to make QSOs over long distances or with other amateurs in rare or more difficult locations. This may be on the HF, VHF, UHF or microwave bands – pretty much anywhere in the amateur radio spectrum. Contests are good opportunities to test propagation to its limits; in the largest events, countries are represented all over the surface of the earth. If a QSO is going to be possible, this is a chance to find out.

Contesters are often technically proficient, too, as they optimise their station to be competitive. Many of the antennas and the station equipment that we all use have been developed by contesters in their pursuit of QSOs at the margins of what is possible.

Whatever your amateur radio station consists of, you can take part in contests. In the vast majority of cases, other participants will be grateful to make a QSO with you.

Many who achieve licensed status are looking for something interesting and challenging to do with their transmitting privileges. Contesting offers an answer – short QSOs with lots of individuals for whom your contact is genuinely valuable.



PHOTO 3: K3LR typical operating position in CQWW DX CW 2023.

How popular is contesting?

In the UK and Crown Dependencies (UK & CD) we have an estimated population of several thousand contesters. For some this is not a high-priority radio interest, but for others it is their main or exclusive focus.

Here are a few examples where we can precisely quantify participation...

Arguably the busiest annual HF band contest is the CQ World Wide DX SSB Contest, held over 48 hours on the last full weekend in October each year. In October 2023 there were 408 entries from UK & CD stations of which many were multi-operator entries – that is around 500 individuals taking part in a single weekend event.

In the 80m Club Championships, one of the RSGB's weekday evening contest series, run during 2023 on HF, 379 participants entered at least one of 18 events in the six-month programme. At VHF/UHF, 651 individuals made an appearance in at least one VHF/UHF UK Activity Contest, in a series which ran for 12 months on several evenings each month.

Fancy entering a Grand Prix?

One exciting aspect of our radio contests is that they are open to all-comers. Using a motoring analogy, a driver with a simple low-powered car can compete directly with a Formula 1 driver on the same track. In the big contests, large numbers of UK & CD amateurs make QSOs with the very biggest (big gun) amateur stations.

Contests typically have multiple sections allowing entrants to compete with similar stations. Many love to compete with other QRP stations, for example, or choose to make a single-band entry to compete with those who are exclusively on the same band.

Those UK & CD amateurs who do not have a suitable QTH to put out a competitive signal are often prepared to go out portable or mobile at all times of year, particularly on VHF and UHF. This is a great way to enjoy the hobby away from urban noise and for those with limited time available.

Initially the goal is to understand what is going on and to learn how to prepare a log that can be submitted. Improvement soon becomes a target.

While we are introducing contesting, it might be useful to answer a few comments that we seem to hear regularly...

Why do contesters send meaningless 59 reports?

At HF, where the expectation of an entrant may be that at least 1000 QSOs will be made in 24 hours, a (supposedly) accurate signal report is of little benefit. A 59 or 5NN signal report becomes a useful label in a very fast QSO – the information following the report must be copied accurately, be it a serial number, a two character state/province identity or a zone number. In effect, the HF signal report is digital. If a QSO is made, it receives a 59(9) report. If not, it hasn't been completed. It certainly isn't meaningless.

At VHF/UHF, contest signal reports may be slightly more scientific; here signal reports are of use as they help entrants know how propagation is behaving in the event.

Why are there contests filling the bands at weekends?

Generally, contests follow an annual cycle, with the same contest appearing on the same weekend each year. Many national radio societies, like the RSGB, sponsor weekend contests.

On some weekends there is an extremely popular contest and bandwidth for any other QSOs during the contest is less available on the contest bands (160, 80, 40, 20, 15 and 10m). This only applies on a very few weekends.

On other weekends there are more parochial, smaller contests – sometimes several coexist. There is generally quite a lot of unused spectrum on the contest bands at these times. There has been a move in recent years to restrict the number of multi-mode HF contests so in the event of a popular contest there is likely to be more bandwidth for alternative modes for non-contesters.

My experience with our 'flagship' multimode contest 'IOTA' has been that clear frequencies have been relatively easy to find when changing bands – so the contest does not appear to occupy the entirety of any of the bands despite having over 2000 participants.

What good is contesting for our hobby?

If we don't use it, we will lose it. Contests fill the bands that are often quiet. With the exodus we are seeing from SSB to FT8, an SSB contest weekend is refreshing, bringing vibrant life to empty bandwidth.

- Contesting improves an operator's skills, whether that be in handling pile-ups (many people calling on top of each other), knowing where to search for QSO partners, or in improving CW reading skills.
- Contesting drives development of techniques and technology.
- Contests allow analysis of 24-hour propagation. Contests are one of the few times when we can guarantee that openings in propagation will be met by QSOs being achieved, simply because there are stations active on all bands from all locations for 24 hours. A case in point is in our own Commonwealth Contest where Long Path QSOs are often made on the 20 or 15m bands between the UK and VK/ZL stations in the darkest hours of the night – how would we know otherwise?

Next month we will look at the history of contesting. Although this series will provide a useful introduction to contesting, if you can't wait to get started, please search for 'Beginner's Guide to HF Contesting' on the RSGB website.

Contests of the month

We have two contrasting HF contests to recommend for April:

FT4 International Activity Day: The RSGB runs an FT4 International Activity Day, which this year is for 24 hours, starting at 1200UTC on Saturday 6 April. Your task is to make as many QSOs as you can using FT4 on the six bands: 160, 80, 40, 20, 15 and 10m. QSOs with your own continent are worth 1 point and those with other continents are worth 3 points. Your QSO points will be multiplied by the number of DXCC countries you work on each band, to give your total score. Full descriptions, rules and some FT4 tips and hints can be found by following the links on the RSGB HF Contest Calendar [3].

UKEI DX CW Contest: The RSGB has entered a partnership with the organisers of the two UK/EI DX Contests (CW and SSB) and have incorporated these contests in the RSGB HF Contest Calendar. The CW contest runs for 24 hours from 1200UTC on Saturday 27 April.

References

- [1] *RadCom Contesting*: <https://rsgb.org/main/radio-sport/>
- [2] K3LR CQWW CW 2024: <http://www.k3lr.com/2023/CQ23CW/>
- [3] RSGB HF Contest Calendar: <https://www.rsgbcc.org/hf/>