

Contesting



PHOTO 1: Chris Hurlbut, KL9A operating at K3LR in ARRL DX CW 2024 (photo courtesy of Tim Duffy, K3LR).



PHOTO 2: Nick, M1DDD running G6XX on the 40m band in the CQ WW SSB Contest.

Where do you start?

There's a well-known joke about a tourist who asks a local for directions to their accommodation. The unhelpful reply that follows is: 'if I were going there, I wouldn't start from here'. With contesting, however, the best place to start is from where you already are.

If you have never entered a contest you might be in one of the following situations:

- You have been operating on the HF bands for some time from your home, using low power and simple wire antennas, and have been making some DX QSOs using FT8 and SSB, but are not currently competent with CW. You are likely to have heard a good number of people calling 'CQ Contest' using SSB and may have come across some contesters on FT4 – perhaps without even knowing it.
- You have been active solely on the VHF bands and have a fairly simple setup with a vertical antenna and most of your operating is done on FM. You have occasionally heard people on the 2m band using FM and calling 'CQ Contest' but don't really know what they are doing.
- You are not able to operate your radio station from home currently but have a VHF/UHF rig in the car that can be used on SSB.

In each of these scenarios, and many others, if you have heard people taking part in a contest and you can transmit on the same frequencies, you are in a great position to make a start in contesting, or to return to contesting after a break.

Where should you contest – HF, VHF or UHF?

The obvious answer is to start where you are, in a radio environment with which you are familiar, with equipment that you are used to operating. There should not be a need to make a huge investment in order to get started. There are some differences between HF and VHF/UHF which add a degree of complication.

If you had full flexibility, you might find that starting at a lower frequency, such as on the 80m band, is easier than at a higher frequency, as you will most likely have a single fixed antenna and no concern about the direction of the signals from other contesters. Contrastingly, on VHF direction becomes significant, thus QSO rates on VHF and above are seldom what can be achieved on HF, as the search for each QSO includes both a search of frequencies and directions. There is also more 'breathing space' on VHF, as you are seldom likely to have a large number of simultaneous callers.

Select your mode

Phone: predominately SSB but can be FM on VHF/UHF. This is probably the most accessible mode with which to start.

CW: in contesting this is mostly sent using computer-generated Morse code but the replies are manually read and then typed.

Datamodes or machine-generated modes (MGMs): this might be RTTY, PSK31 or 63, FT4 or FT8 but others are possible.

On HF, a sensible starting point would be to use SSB or FT4. On VHF, starting with SSB, FM or FT8 would be equally sensible.

The advantage of the FT modes is that the contest dialogue, which we call the 'contest exchange', is defined by the software being used. For example, WSJT-X will automatically send and receive all of the conversation to complete a contest QSO.

Phone is pretty straightforward too, as the exchange is often simple – a signal report and a serial number on HF, the same on VHF, plus your locator. At HF, signal reports are not used for scientific analysis and are unchecked so generally participants send 59(9), but at VHF signal reports are checked and will be more 'genuine'.

Select how you are going to operate

The basic operating procedures, which apply to all modes, are:

Search and Pounce (S&P): this is where you tune across the band on which you are operating and respond to other stations who are calling CQ. This is a good procedure for starting as it is low-stress.

Running: this is where you call CQ and hope others will find you and reply to your call. This can be more daunting than S&P, but can also be better for your QSO rate, providing others can find you. It can be a bit like the proverbial buses where there are no callers until three turn up at the same time.

Assisted/unassisted: in many contests you can choose whether you will look for other stations yourself (unassisted) or you will have the help of software and internet tools which can help you find and identify other stations (assisted).

We will consider these operating procedures in more detail in a later issue.

The big HF SSB contests

On HF we have a number of very popular international contests which have huge numbers of participants and which are very easy to 'dip into' if you are new to contesting. The majority of participants don't operate for the whole



PHOTO 3: Stephen, MORTI at the ARRL HQ station W1AW.

permitted period. If you are collecting countries or US states for an award, these are a great opportunity to make QSOs to add to your totals. There will be lots of stations running who will be pleased to make a QSO with you.

CQ WW DX SSB: this takes place on the 160, 80, 40, 20, 15 and 10m bands and lasts 48 hours over the last weekend in October each year. You can work anyone and all you have to send them is a 59 report plus your CQ zone number (14 for UK operators) [1].

CQ WW WPX SSB: this takes place on the 160, 80, 40, 20, 15 and 10m bands and lasts 48 hours over the last weekend in March each year. You can work anyone and all you have to send them is a 59 report plus an incrementing serial number, starting at 1 [2].

ARRL DX SSB: this takes place on the on 160, 80, 40, 20, 15 and 10m bands and lasts 48 hours over the first weekend in March each year. You can work stations in the USA and Canada and all you have to send them is a 59 report plus your transmit power, '100' say [3].

To make an entry to these contests you will need to use computer logging, but you could make some QSOs without submitting an entry, as many people do. In all of these contests there are sections for different power levels and for single-band operation too. So, if you only have an antenna for one band, you can still make an entry if you wish. If you want to submit an entry, be sure to read the rules first.

There are also similar big HF CW and RTTY contests which are splendid, but here we are concentrating on the easiest opportunities to make a start – although, of course, SSB contesting might be the beginning of a journey that leads to other modes.

RSGB contests

With some notable exceptions (the Commonwealth Contest and the IOTA contest), RSGB contests are designed primarily for UK and Crown Dependency amateurs – to compete with each other.

On HF, if you are able to transmit SSB on the 80m band, a sensible starting point would be to join in the monthly 80m Club Championships SSB evenings, which are for 90 minutes, once a month from February to July, or the 80m Autumn Series which have monthly 90-minute SSB evenings, from September to November [4].

Alternatively, if you are enjoying FT modes on HF, why not join in the FT4 series evenings which are monthly from February to November with a break in August. These include five bands: 80, 40, 20, 15 and 10m. FT4 tips and hints are available on the RSGB Contesting website [5].

On VHF, if you are able to operate on the 2m band using SSB, you might start with the monthly 144MHz UK Activity Contests, which run for 150 minutes on the evening of the first Tuesday of each month. These are not exclusively SSB, but there is no requirement to use anything else [6].

Alternatively, if you are only able to operate on the 2m band using FM, there are 144MHz FM Activity Contests for 55 minutes in the hour prior to the start of the UK Activity Contests. These avoid the popular FM channels and are also a good starting point [7].

Club contesting

Several of the contest series that the RSGB run on weekday evenings, including those mentioned above, are designed for club members to contribute to a total score for their club, either on HF, which is predominately on the 80m band due to its UK-wide propagation, or on VHF, where 2m SSB is the most popular, but where there are many other options.

Being a member of an RSGB-affiliated radio club is not a requirement for entering, but being part of a team effort is great fun and is highly motivating. If your club is keen on contesting, you will probably know who to talk to about joining in.

If you are not in a participating club, or your club doesn't take part, you might join the RSGB Contest Club and be part of a small team who enter many of the RSGB club-based contests [8].



PHOTO 4: Stephen, MORTI's CQ WW RTTY 2023 certificate for operating from Jersey as MJ0X.

Reasonable expectations for beginners

Starting out can be disconcerting as it soon becomes obvious that some of the participants in a contest have been contesting for years and have learned all sorts of ways to maximise their scores. Your initial aim should be to enjoy the process, the operating, the logging and the log submission. When you are new to contesting, you can expect to be made welcome and that other operators will recognise that you are unfamiliar with it and will be patient as you learn how to take part.

Featured UK contester: Stephen Kopetsch, MORTI

I began my contesting adventure in the 1990s. I definitely prefer CW. In recent years, I have been traveling to Jersey for larger contests using MJ0X. I have had to optimise the equipment due to airline allowances. Using a compact radio and carefully-selected wire antennas gives you a chance for good results! (Photos 3 and 4).

Contest of the Month: CW Field Day, also known as National Field Day (NFD)

NFD is a historic contest which encourages operators, typically in groups, to operate 'off-grid' using CW. It runs for 24 hours starting at 1500UTC on Saturday 1 June.

The six HF contest bands from 160 to 10m are used and the scoring is based on points for each QSO, with more for working portable stations. DXCC entities worked per band are multipliers [9].

References

- [1] CQ WW DX Contests: <https://cqww.com>
- [2] CQ WW WPX Contests: <https://www.cqwp.com>
- [3] ARRL Contests: <https://contests.arrl.org>
- [4] RSGB HF Contests: <https://www.rsgbcc.org/hf>
- [5] FT4 Tips and Hints: https://www.rsgbcc.org/hf/information/ft4_tips_and_hints.pdf
- [6],[7] RSGB VHF Contests: <https://www.rsgbcc.org/vhf>
- [8] RSGB Contest Club: <https://rsgb.org/main/radio-sport/rsgb-contest-club>
- [9] CW Field Day or NFD: <https://www.rsgbcc.org/hf/rules/2024/rmfd.shtml>
- [10] RadCom Contesting: rsgb.org/radcom-contesting

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