

RSGB MGM & MGMAC's on 2m and 6m

These contests are an experiment to provide somewhere stations can try contesting using Machine Generated Modes (MGM) like FT8. We are not restricting the contests to particular modes, and have tried to keep the rules simple and flexible to allow different and new modes to be used.

Following on from the first month of activity there seemed to be some confusion as to the use of logging software and the exchanges as the full release in December of WSJT-X provided the ability to use the EU Contest Mode facility.

The ethos of these contests is as previously highlighted, to make scoring and rules simple so that they can flourish as a new concept and allow stations to use any recognized MGM mode where maybe previously they had not.

We expect that, given the short duration of these contests, the majority of activity will be on FT8 however it maybe pertinent to re iterate the possibilities to make these contests accessible to as wide an audience as possible.

Modes

Any recognized MGM mode e.g. FT8, FSK441, ISCAT, JT65, RTTY, PSK etc. Contacts via CW and EME (moon bounce) are not permitted.

Contacts

Only one scoring contact may be made with a given station per band.

Exchange

Report (as appropriate for the mode in use) and 4-character Locator (e.g. IO91).

Scoring

1 point per km. The distance is calculated using the 4-character locators between the centres of the locator squares (e.g. IO83MM to IO91MM). A qso within one's own square (e.g. IO91 to IO91) scores 50 points.

Serial numbers

Serial numbers are NOT required or checked to aid simplicity even though the Ver 2 of the various software currently available do support this.

Locators

Only 4-character locators are required, and only the 4-characters are used for scoring

Multipliers

There are no DXCC or Locator square multipliers.

The points total for each band will be tabulated separately.

These contests are likely to create high levels of activity, and if all that were to converge on the normal FT8 operating frequencies, those frequencies will become saturated. Therefore, we encourage stations to spread out away from the normal FT8 operating frequencies, and suggest 144.165 - 144.195 MHz and 50.310 - 50.340 MHz as USB dial frequencies.

Practical Operation

These contests were in the planning stage well before the WSJT-X Ver 2 full version was released in December 2018.

In the two MGMAC events in January it was assumed by some that this could be used even though, as the rules show, this type of exchange wasn't required in these contests.

This caused serious confusion and in some cases software malfunction. So, going forward for the MGMAC's and the RSGB 2m and 6m MGM events in 2019, please don't use EU VHF Contest Mode – this will be developed during the year and looked at for introduction in 2020.

Operational Software

For our VHF purposes there are three suites of software that currently seem to work as required so this is very much a question of "taste".

WSJT-X Ver 2 <https://physics.princeton.edu/pulsar/k1jt/wsitx.html>

MSHV Ver 2.09 <http://lz2hv.org/mshv>

JTDX Ver 2.0.1-rc128 (has no contest mode) <https://www.jtdx.tech/en/>

There are other flavours available however for our purposes the above are recommend as a basis to start operating.

There are still some folks out there using pre Ver 2 software – these will not talk to Ver 2 for MSK144 and FT8 however other modes such as FSK441 and JT6M will still work.

Please familiarise yourself with the software so as not to cause undue interference and also disable any ability for pc sounds/apps to put any audio into the PC. SKYPE calls and other various erroneous transmissions have been heard!!!!

Making A QSO

A contest qso in these RSGB series' is no different to making general MGM qso's on the bands, hence the initial requirement in the rules for simplicity.

Operationally it is possible to make S&P qso's and call CQ whichever is preferred.

Respect for local operators is paramount and although hard to establish, please think about transmitting in 1st period when beaming North to South through West and in the 2nd period beaming North to South through East.

This is not any exact science in a local area but please take care to not deliberately jam another station.

Whilst the software packages have very different front ends the result in terms of a completed QSO and the produced log are standard.

It is clear that during a qso the report can change – however, once an R report and RRR /RR73 is sent from one end, the reports should synchronise.

Once the qso is completed all software's create a log (either user generated or automatically) within the program again this is down to the operator and preferences.

There are also facilities to export the log in ADIF and Cabrillo Formats.

Operational Logging

The RSGB CC provide a fully compatible logging software package which can be used in real time – exactly the same as during a traditional contest.

Minos has been developed by Mike G0GJV and team and is now tailored to provide real time logging in MGM contests. <http://minos.sourceforge.net/>

There is also a function for post contest logging where the information from the log file can be keyed in manually before being uploaded into the contest robot.

N1MM will also support the upload from the software for these contests.

Some further links for info: <https://www.rsgbcc.org/vhf/links.shtml>

Log Upload

Contest completed, you will be ready to upload to the robot.

There are various ways to do this all of which are designed to keep it as simple as possible.

Below is a brief guide to the different ways you can submit your entry.

<https://www.rsgbcc.org/vhf/howto.shtml>

Option 1 Upload your log

<https://www.rsgbcc.org/cgi-bin/vhfenter.pl> and chose the correct contest to enter.

Option 2 Manual Submission.

You can enter from a home brew paper log system or transpose from the log file created within the software.

<https://www.rsgbcc.org/cgi-bin/cover.pl>

Submitted Logs

To check that your entry has been received in the correct contest etc

<https://www.rsgbcc.org/cgi-bin/vhfposted.pl>

The RSGB VHFCC are currently investigating a way to upload directly from the software packages to the robot.

Please also check the following link for more info. <https://www.rsgbcc.org/vhf/howto.shtml>

The key to the success of these contests is actually entering a log so please make every effort so we can progress the development of this exciting mode of VHF contesting!

Results and more information can be found <https://www.rsgbcc.org/vhf/>

Signal Quality

Finally, and very importantly, in the first sessions of these contests there have been some issues in signal quality.

When adjusting the audio input from the PC to the radio – please ensure that the audio stream is filtered with, at the very least an isolator and that the digital gain control/pc audio setting are not on MAX in an attempt to try and screw as much power out as possible.

Co-existence with one's radio neighbours is an absolute must.

In this modern age the 10 % rule still applies ...in other words just back it off a little!

Contact

For any queries please email vhf.query@rsgbcc.org