

VHF-UHF Field Days and the challenge of change

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Winter 2015 Event Dates:

Saturday 20 and Sunday 21 June

Duration, all call areas other than VK6:

0100 UTC Saturday to 0100 UTC Sunday

Duration in VK6 only:

0400 UTC Saturday to 0400 UTC Sunday

"The time has come," the Walrus said, "To talk of many things . . .", starts a verse from author Lewis Carroll's famous novel, *Through the Looking-Glass, and What Alice Found There*.

Some time ago, the WIA Board expressed a desire to see some development in the VHF-UHF Field Day events, in addition to encouraging "the market" to decide on a scoring methodology. As you will recall from the article covering the last two Field Days in the March issue, the market has pretty much decided to have an each-way bet. Subsequently, some feedback has been received and various discussions have been posted on amateur radio online forums.

As a consequence of the past year's experiences, the online discourse and feedback received, the Winter and Spring 2015 events will operate under some changes to the rules. The objective here is to try and attract more people to participate in the Field Days, and to encourage more operators to submit logs. In other words, to reduce the barriers to entering the Field Days – that is the challenge.

Change, hell and handbaskets

There are now four Sections, reduced from six in the previous rules, and four Sub-sections, up from two in the previous rules. Operators can enter a log for *either* 24-hour operations, *or* 8-hour operations. This breaks the nexus between 24-hour and 8-hour operations that prevailed previously, where stations could submit a log for 24-hour operations and select the best 8 hours to submit another log for that. Now, operators need to decide their strategy beforehand for either 24-hour or 8-hour operations. Of course, Murphy and the weather might curtail what was to be your 24-hour operation, in which case you can recover something by submitting a log for 8-hour operations!

The four Sub-sections introduce a new approach, with Single-band, Four-band, All-bands and Digital operations. Not too many people or teams can amass the gear for all-band 'super stations'. For many, that sort of operation is aspirational. Part of the purpose of the four sub-sections is to provide something for newcomers to amateur radio as well Field Day newbies and to cater specifically for Foundation and Standard licensees. Marshalling the requirements for a single-band operation, or perhaps two, three or four bands, is not a daunting task. A founding principle of the Field Days is to go out and have fun, so these categories can provide a taste of that.

Digital modes enjoy considerable popularity among the VHF-UHF-microwave fraternity, particularly for weak-signal working. Providing it as a separate sub-section has been done to highlight this field of amateur experimental operations.

To up the Field Day pace a little, the repeat contact period has been reduced to two hours, from three hours previously.

Note that contacts now require exchanging 6-character (6-char.) locators for all contacts, including for Division 1. However, Division 1 scoring and Rover operations are still based on Squares (4-char. locators).

One last thing – only electronic logs in ASCII text (.txt) format will be accepted from now. Online log uploads proved popular with participants in the Spring 2014 and Summer 2015 events.

Sections

A: Portable station, single operator, 24 hours (A1) OR 8 hours (A2).

B: Portable station, multiple operators, 24 hours (B1) OR 8 hours (B2).

C: Home station, 24 hours (C1) OR 8 hours (C2).

D: Rover station, 24 hours (D1) OR 8 hours (D2).

Note that 8 hours means **any period up to 8 hours** (but the period must be contiguous); i.e. you can submit a log for a few contacts (even just one!). Likewise, 24 hours means any period from 8 hours up to 24 hours.

Sub-sections

(a) **Single-band only:** any single band permitted on the operator's licence.

(b) **Four-bands:** 6 m/2 m/70 cm/23 cm – any two, up to the four – only.

(c) **All-bands:** all bands 50 MHz-up permitted on the operator's licence.

(d) **Digital:** contacts using non-voice digital modes (e.g. FSK441, JT4, JT65, MAP65, PSK31, RTTY, etc) are encouraged for any Section–Sub-section, but entries *must* be submitted in a separate log, scored separately. Operators may submit a log for any other section in addition to their digital log entry. 'Digital' means those modes where the received signal is decoded by a computer.

Stations entering the all-bands sub-section cannot enter additional logs for the four-bands or single-band sub-sections.

A station operating on any number of bands cannot enter the single-band section for each band they use. *That's not in the spirit of this section!*

General Rules

There are two Divisions:

Division 1 scores contacts on the basis of Squares (4-character locator) worked; Division 2 employs distance-based scoring. Operators may enter either Division 1 or Division 2, or both. See the scoring rules below. A Square refers to the Maidenhead Locator system definition – as denoted by the 4-character locator. To facilitate scoring for Division 2, all stations are required to exchange SubSquare locations (i.e. the 6-character locator).

Operating periods:

Stations may elect to enter either a 24-hour section or an 8-hour section, but not both. Those stations entering the 8-hour sections may operate for more than eight hours, and nominate which 8-hour period they wish to claim for scoring purposes, but **the 8-hour (or lesser) period submitted has to be contiguous**, unlike what was published in the May issue of AR magazine. Unfortunately, an analysis of the impact of non-contiguous periods revealed that it created an inordinate amount of work and time in log assessments.

Rover stations:

The Rover section is for all portable or mobile stations that operate from more than two Squares or that change Squares more than twice; ie. Square A to Square B to Square C, etc, or A-B-A-B etc. However, a station may move from Square A to Square B and return to Square A, without having to enter as a Rover.

Entering more than one section:

If a Portable or Rover station spends part of the contest period operating from their home station, they may also enter the Home station section.

Two operators:

If two operators set up a joint station with shared equipment, they may choose to enter Section A or C as separate stations under their own call signs, or Section B under a single call sign. If they enter as separate stations, they may not claim contacts with each other.

Multi-operator stations:

Portable stations with more than two operators must enter Section B under one call sign. Operators of stations in Section B may not make contest exchanges using call signs other than the club or group call sign. Home stations may enter as a multi-operator station, but only one call sign can be used.

Operating Rules

One call sign per station. Operation may be from any location. A station is portable only if all of its equipment is transported to a place that is not the normal location of any amateur station.

You may work stations within your own locator Square.

Portable stations may change location during the Field Day, provided that the station is dismantled and reassembled at each move.

Repeater, satellite, EME or crossband contacts are not permitted.

Except for CW, no contest operation is allowed below 50.150 MHz. Recognised DX calling frequencies must not be used for contest activity. Suggested procedure for SSB stations is to call on .150 or higher on each band, and QSY up to make the contest exchange.

Stations may enter either Division 1 or Division 2, or both.

About Contest Exchanges

RS or RST reports, a serial number, and your **6-character** Maidenhead locator (the Sub-Square). The Maidenhead locator is optional if it has already been exchanged in a previous contact during the Field Day and neither station has moved since then.

Note that Squares must be used for Division 1 scoring calculations.

For digital contacts, as RS or RST reports plus serial number make for a cumbersome exchange, it is sufficient to exchange call signs plus two further digits that can not be predicted by the other station. This is the same practice as used in the annual Ross Hull contest. However, use a serial number when logging each contact.

Repeat Contacts – Re-work Period

Stations may be worked again on each band after **two** hours have elapsed.

If either station moves to a new location in a different Square, repeat contacts may be made immediately. If the station moves back into the previous locator Square, the re-work period limit of two hours still applies to stations worked from that Square previously.

Your Log

Your log should cover the entire operating period and include the following information for each contact: UTC time, Frequency, Station worked, Serial numbers and locators exchanged.

- All-band stations cannot submit a separate log for a single-band or four-band entry.
- Logs for a single-band operation must not include any contacts on other bands.
- Logs for a digital operation must not include any contacts using non-digital modes.
- Logs for a four-band operation must not include any contacts on other bands.

Division 1 Scoring

For each band, score 10 points for each **Square** (4-char. locator; i.e. the first 4 characters of your 6-char. locator) in which your station operates, plus 10 points for each Square worked, plus 1 point per contact. Multiply the total by the band multiplier, as follows:

6 m	2 m	70 cm	23 cm	Higher
x 1	x 3	x 5	x 8	x 10

then total the scores for the bands used. Thus, the score is based on totalling the number of locator Squares worked and the number of contacts made.

Division 2 Scoring

All contacts are scored on the basis of one point per kilometre, multiplied by the scoring Multiplier for each band in Table 1, with points/100 km applied after 700 km for 6 m, 2 m and 70 cm, to 'flatten' scores for DX experienced under enhanced conditions on these bands. A 200 km contact on 432 MHz would be $200 \times 2.7 = 540$ points. A 1000 km contact on 50 MHz would be $703 \times 1.7 = 1195.1$ points¹.

The distance error of using Sub-Square (6-character) locators is small and accuracy is sufficient for the purposes of this event. Distance is calculated from the Sub-Square centre.

Band	Multiplier	Distance Scoring
50 MHz	1.7	1 point / km to 700 km; thereafter 1 point / 100 km or part thereof
144 MHz	1	1 point / km to 700 km; thereafter 1 point / 100 km or part thereof
432 MHz	2.7	1 point / km to 700 km; thereafter 1 point / 100 km or part thereof
1296 MHz	3.7	1 point / km.
2.3/2.4 GHz	4.4	1 point / km.
3.4 GHz	5.4	1 point / km.
5.7 GHz	6.4	1 point / km.
10 GHz	7.4	1 point / km.
24 GHz & up	10	1 point / km.

Total the scores for the band or bands used.

Submitting Your Logs

Only electronic logs in ASCII text (.txt) format will be accepted from now.

The free VK Contest Log (VKCL) software, from Mike VK3AVV, caters for the VHF-UHF Field Days (including Division 1 and Division 2 scoring) as well as a host of other contests. You can download it from: www.mnds.com.au/vkcl/

A **Cover Sheet** must be included with your log, which clearly states: –

- the Contest event (i.e. Winter 2015 VHF-UHF Field Day) and its date;
- Division 1 / Division 2 (as appropriate);
- the relevant Section–Sub-section and the Period (24 hr or 8 hr);
- Name and Callsign of operator submitting the entry; Names and Callsigns of other operators for Multi-operator stations;
- contact email address; mailing address, and
- a declaration that the operator/s have abided by the rules.

Upload your logs via the WIA website Field Day Log File Uploader, at:

www.wia.org.au/members/contests/upload/

Logs must be received by **midnight, Monday 6 July 2015**. Early logs would be appreciated.

Certificates

Each top-scoring station in every Section–Sub-section will receive a colour certificate in .pdf format, sent to the contact email address on their log cover sheet.

In addition, colour certificates will also be sent to all second and third place-getters and top-scoring Foundation stations.

Check for Updates

Check for any updates or advisories on the VHF-UHF Field Days website at:

www.wia.org.au/members/contests/vhfuhf/

The Next Event

The Spring 2015 event will be over Saturday 14 and Sunday 15 November 2015.

References

1. Roger Harrison VK2ZRH, *The basis of distance-based scoring for the VHF-UHF Field Days*, *Amateur Radio*, June 2014, pp 11-13.