# Summer VHF-UHF Field Day 2016: fun in the sun!

Roger Harrison VK2ZRH

# **Summer 2015 Event Dates:**

Saturday 9 and Sunday 10 January

**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

#### On summertime

Summertime
And the hilltop is breezy
The bands are jumpin'
And the feeling is high
The DX is callin'
Up twenty from one-five
So CQ field day
See who will reply.
- after George Gershwin

Exuberance seems to drive many ham radio activities carried on in summer. Particularly on the bands from 50 MHz on up. There's a general anticipation – even an expectation – that *things* are going to happen. Summertime is considered the traditional 'DX season', with tropospheric inversion and ducting creating DX openings, while ionospheric sporadic E also offers surprise DX opportunities. However, Greek philosopher and scientist, Aristotle, cautioned that "One swallow does not make a summer, neither does one fine day". How come he knew about the vagaries of DX openings in 350 BCE?

Philosophy and science aside, the first VHF-UHF Field Day for 2016 continues the developments introduced for the 2015 Winter event – the revised categorization of Sections and Sub-sections, the two-hour re-work period and the exchange of 6-character locators for all contacts. The two Divisions are retained for this event – grid-square scoring and distance-based scoring.

As many readers would be aware, in 2014, the WIA board decided that the VHF-UHF Field Days should be run with two parallel sets of rules for the two scoring systems, to "let the market decide" a preference, and further, that the Board wished to see development of the contests. Curiously, participants since the Winter 2014 event have by and large had an "each way bet" on Division 1 versus Division 2 scoring. As can be seen from the contest rules beginning with Winter 2015, there has been some development of the rules to reduce the barriers to entering the Field Days, especially for newbies, and to encourage more operators to submit logs. So, by the time you read this, the WIA board will have launched a consultation process to canvass views about the rules for, and conduct of, future VHF-UHF Field Days.

The events since Winter 2014 have seen some interesting contest developments. In the January 2015 event, Justin VK2CU and Matt VK2DAG raised the bar for everyone by adding 76 GHz to their station arsenals. How soon before 122 GHz appears in contest logs? I also hear tell that some contesters are working on automating their beam and dish pointing technologies, to steal a march on competitor stations.

Four stations took up the "digital challenge" with the Winter event, the first time the Digital Sub-section appeared in the rules. Here's hoping that digital contesting develops further. Foundation stations from three states are now appearing in logs and it is hoped that this trend will continue, with more Foundation operators participating over future events. West Australian stations appeared in logs in 2015, after some years' absence. When will we see VK6s submit logs?

From late 2014, Mike VK3AVV has developed log-checking software to ease the burden on this aspect of managing these VHF-UHF events, and done a sterling job, indeed. Grateful thanks to Mike. Thanks are also due to Colin Hutchesson VK5DK and Michael Binz VK3ALZ for sharing the management of the events over 2014-2015.

Let's get on with it!

# **Strategies**

The introduction of the **Single-band only** Sub-section is designed to encourage newly-licensed operators, those new to the bands above 30 MHz, those returning to the hobby after a period of absence, or any operator who takes it in mind to join in casually.

If you're in this group, but have your stuff a bit more together, consider entering the **Four-bands Sub-section**. At a minimum, you can operate on any two of the bands 6 m/2 m/70 cm/23 cm, or three, or the whole four.

A founding principle of the Field Days is to go out and have fun, so the Single-band and Four-bands Subsections meets that philosophy and provides a taste of that for newbies. Look out, you might get hooked!

For those who are 'old hands' at VHF-UHF Field Day shenanigans, why not invite an F-call or Standard to join you in the field. Or, invite an F-call or Standard to your home QTH for a few hours of the contest. Likewise, if you know someone returning to the hobby. Get them involved and mentor them through the process of making contest contacts. Light blue touch paper and retire!

Acquaint yourself with the **Contest Radar website** (www.contestradar.com). Enter your planned portable location (4- or 6-character locator), or your home QTH, along with other salient station details. The website will display your details on a map – along with the fleet of other stations doing the same. You can see at a glance who's where. Notably, the website is integrated with the VKCL logging software.

#### 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** (<u>but the period must be contiguous</u>); 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 Sub-Square 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**.

#### Rover stations:

The Rover section is for all portable or mobile stations that operate from more than two Squares <u>or</u> that change Squares more than twice; ie. Square A to Square B to Square C, etc, <u>or</u> 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 callsigns, or Section B under a single callsign. 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 callsign. Operators of stations in Section B may not make contest exchanges using callsigns other than the club or group callsign. Home stations may enter as a multi-operator station, but only one callsign can be used.

## **Operating Rules**

One callsign 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 callsigns and 6-character locators, plus two further digits that can not be predicted by the other station. This is similar to the practice used in the annual Ross Hull contest. However, when compiling your log to enter the contest, include a unique serial number for each successful 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 propagation 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  $703 \times 1.7 = 1195.1$  points<sup>1</sup>.

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 are being accepted now. **Note:** If any operator participating in the contest has a genuine disability or other impediment preventing submission of a digital log, a paper log will be accepted, provided it reaches the WIA National Office by post or fax by the deadline time and date.

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 25 January 2016. 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 Winter 2016 event will be over Saturday 18 and Sunday 19 June (being the weekend nearest the southern hemisphere Winter solstice).

#### References

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