Changes under way for VHF-UHF μwaves contests

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The online VK Log Checker (www.vklogchecker.com) has been in use since a trial with the 2025 Summer event log submissions. All logs for the 2025 Winter Field Day were submitted directly through the VK Log Checker. Some issues were discovered and are in the process of being resolved, which will hopefully be completed in time to process the 2026 Summer event.

Having use of the new VK Log Checker developed by Alan Shannon VK4SN, Chair of the Radio Activities Committee, and the efforts of his son, is very much welcomed. The majority of the WIA sponsored contests are now adjudicated using the VK Log Checker.

You can now choose to use **either** of two loggers – **VKCL** (VKCL 4.15), the one many VHF-UHF contesters have known for so long – or **N1MM Logger+**, adopted by some contestants for the 2025 Summer and Winter events. N1MM Logger+ is widely used across many other contests, particularly HF contests.

For contesters using the VKCL logger, the VHF log file output needs to be *converted* to Cabrillo 3.0 format *before* submitting to the VK Contest Log Checker. You can download a converter from: tinyurl.com/CabConv.

About modes

Some confusion has arisen about what modes are permissible on the field days. **All** of the available voice modes are permitted – SSB, FM, AM, FreeDV, or those not yet invented. If you're making contacts using speech, it's categorised as PHONE. When logging, please enter **PH** in the mode field.

Of course, when making contacts with your Morse key, enter **CW** in the log. Similarly, when using any of the digital modes, enter **DG** in the mode field.

The Summerland Amateur Radio Club VK2SRC/p, fielded a group of portable stations at Vista Point, northeastern NSW, as they often do, covering all bands from 23cm through 3cm. This was the 6m-2m-70cm 'lower bands' setup.

Follow this method and the VK Log Checker will recognise the mode used for the logged contacts. The Rules for the events will be updated to clarify this and avoid further confusion.

Field Day dates

Over the years, I have noted consistent comments that went something like this: "why are the [VHF-UHF] field days on *different* weekends every year . . . why are the Spring and Summer field days so close together . . . how does anyone use the Algorithm to work out the dates?"

Well, the ambiguities of the past have been expunged (no more Algorithm!) and **all events are on specific weekends** that are not too different from the past, except for the Spring event, which has been moved from late November (right on the cusp of Summer!) to late September, placing it close to the vernal equinox. This also extends the time between the Spring event in any

VHF-UHF Field Day dates 2026-2030

	1st w/end January	Dates	Related Solstice	Days difference
Summer	**2026**	3-4	22 Dec 2025	+12
	2027	2-3	22 Dec 2026	+11
	2028	1-2	22 Dec 2027	+10
	2029	6-7	21 Dec 2028	+16
	2030	5-6	22 Dec 2029	+14

	3rd w/end June	Dates	Related Solstice	Days difference
Winter	**2026**	20-21	21 June	0
	2027	17-18	22 June	+4
	2028	17-18	21 June	+3
	2029	16-17	21 June	+4
	2030	15-16	21 June	+5

	3rd w/end September	Dates	Related Equinox	Days difference
Spring	**2026**	19-20	23 Sept	+3
	2027	18-19	23 Sept	+4
	2028	16-17	22 Sept	+5
	2029	15-16	23 Sept	+7
	2030	21-22	23 Sept	+1

Ref: www.astropixels.com/ephemeris/soleq2001.html E&OE

year and Summer field day the next year.

Dates for the 2026 events are in the accompanying panel and on the WIA website page. Field Day event dates for following years follow the same pattern, as can be seen in the table I have compiled of **proposed dates for 2026-2030**, based on the above date planning, which is reproduced here and is also posted on the WIA website VHF-UHF Field Days page.

The weekends have not been chosen by the eclectic empirical method ("that looks OK"). There's a rationale behind the selection of dates. Included in the rationale are considerations on propagation, but it's not the only thing.

Firstly, the *fulcrum* of the three events is **the Winter field day,** chosen so that it occurs very near the Winter solstice (see the table of dates for 2026-2030). In terms of propagation, this is that part of the year with lower, or least, humidity – favouring the bands from 24 GHz to 240 GHz, for which activity is growing. For 6m, and possibly 2m, the Winter solstice is generally centred within the Winter sporadic-E season (though less "active" and shorter-lived than the Summer season).

You will also note that the **Summer field day** is now closer to the Summer solstice (21-22 December prior) and thus further under the umbrella of the sporadic-E season peak (but erratic) occurrence as well as at the start of the annual Ross Hull Contest.

As a phenomenon, Sporadic-E is well-named. No two Winter/Summer "seasons" are the same, let alone similar. Every sporadic-E event is unlike another, but some openings may have some remarkable similarities. In addition, the prospects of tropospheric enhancement to long-distance propagation peaks in the Summer months.

Some amateurs may feel that the first weekend of January is inconvenient as it's in, or too close to, the peak holiday season. But, the same was said in the past when it landed in the second weekend of January. Likewise, others suggested the Summer event was close to "back to work" time.

Keen contesters find a way. If social or work commitments are an impediment to hill-topping portable on a contest weekend, get on the bands from home and exchange serial numbers with the portable stations.

More than a decade ago, when field day dates were seemingly decided rather like a race horse auction, the Spring field day was settled to be on the *last weekend of Spring* to avoid clashing with a community sporting event in the southern states. Meteorologically, it was neither Spring nor Summer.

To move the **Spring field day**, I sought to avoid clashes with other popular WIA sponsored contests, while keeping in mind prospects for propagation. In Australia, September 1st is nominated as the first day of Spring, based on the meteorological calendar. This is a fixed date used for tracking seasonal statistics, while the astronomical spring begins on the September equinox, which falls around 22-23 September.

Sporadic-E occurrence is minimum around the equinoxes, but transequatorial propagation (TEP) peaks at this time, which is good news for the scant few operators in the northern regions of NT, WA and Qld, whom we'd like to encourage participating in the field days. Meteorologically, the general region above the Tropic of Capricorn has only two seasons – wet and dry.

Meanwhile, the majority of field day stations operate south of the Tropic of Capricorn where Spring brings no particular propagation advantages, excepting perhaps some tropospheric enhancement events for those luckily positioned.

The date changes were worked out in conjunction with the WIA Radio Activities Committee Chair, Alan Shannon VK4SN, particularly to avoid clashes with other popular VK contests, and based on contesters' previous feedback.

Band multipliers

Technology and contesters have made extraordinary strides over the last decade. It's a pity that the band multipliers have not kept pace! The table of multipliers offers no higher values above 24 GHz, and cogent arguments have been put forward that the multiplier value should increase band-by-band all the way to our last allocation at 248 GHz.

I agree. Indeed, I have long agreed. However, the question then arises as to how much the band-by-band increase should be, or the rate at which the multiplier increases. I looked at what other contests overseas do about this, finding that no others are similar, views differ and Australian conditions and practices are not mirrored elsewhere. Multipliers used in HF contests operate in a different way, so is no help.

Take a look at the accompanying table, titled **Considerations for VHF-UHF- μwave Field Day contest multipliers.**

Firstly, you'll note that "Light" is included. I'll get to that later.

I have provided four columns of proposed band multipliers. The mathematics of the multiplier schemes is explained further on.

A greater multiplier for 6m is allocated to encourage and reward more use of the band in VHF-UHF Field Days, where past custom and

2026 Dates for VHF-UHF-μwave Field Days

Summer: 1st full weekend of January.
Times: 0100 UTC Saturday through 0059 UTC Sunday (0400 / 0359 in VK6).

Winter: 3rd weekend of June
Times: 0100 UTC Saturday through 0059 UTC Sunday (0300 / 0259 in VK6).

Spring: 3rd weekend of September
Times: 0100 UTC Saturday through 0059 UTC Sunday (0400 / 0359 in VK6).

Considerations for VHF-UHF-μwave Field Day contest multipliers

Freq.	BAND	Current	$2^{1/16}$/band	x + 1/band	♫ = 1.06	$2^{1/2}$/band
50 MHz	6m	1.7	3.132	3	3.18	4.242
144 MHz	2m	1.0	1.000	[x] 1	1.00	1.000
432 MHz	70cm	2.7	1.044	2	1.06	1.414
1296 MHz	23cm	3.7	2.088	3	2.12	2.828
2300 MHz	*13cm	–	3.132	4	3.18	4.242
2400 MHz	12.5cm	4.4	4.176	5	4.24	5.656
3300 MHz	9cm	5.4	5.220	6	5.30	7.070
5650 MHz	6cm	6.4	6.264	7	6.36	8.484
10 GHz	3cm	7.4	7.308	8	7.42	9.898
24 GHz	12mm	10	8.352	9	8.48	11.312
47 GHz	6mm	10	9.396	10	9.54	12.726
76 GHz	4mm	10	10.44	11	10.6	14.140
122.25 GHz	2.5mm	10	11.484	12	11.66	15.554
134 GHz	2.24mm	10	12.528	13	12.72	16.968
136 GHz	2.2mm	10	13.572	14	13.78	18.382
241 GHz	1.25mm	10	14.616	15	14.84	20.984
248 GHz	1.2mm	10	15.660	16	15.90	21.210
'Light'		–	16.704	17	16.96	24.038

practice left 6m something of an orphan. As the principle is accepted, it is now proposed to be somewhat greater, along the lines first proposed in my article, *Basis of distance-based scoring for the VHF-UHF Field Days,* AR, June 2014, p11.

We have two allocations in the 13cm Band: 2300-2302 MHz and 2400-2450 MHz. Much effort by the WIA was put into retaining that 2 MHz at 2300 MHz. So, we should be using it.

Recognising it as "another" band for VHF-UHF Field Days (plus MADs) goes a long way towards retention. The Band Plan specifies 2300-2302 MHz use as narrow band (NB), implying weak-signal working. It's 100 MHz away from the LAN/LIPD interference in 2400-2450 MHz. The allocation below 2300 MHz is for Radio Astronomy, while the 2302-2400 MHz allocation is for LTE telecomms. Likewise with the four bands above 122 GHz.

The spectrum beyond our 'top' band at 248 GHz is 'open usage.' **From our ITU definition, there's a good argument to include light in field day events,** particularly as an increasing number of notable VK amateurs have been, and continue, experimenting with light transmission and propagation.

When our forebears – wireless experimenters – took to the spectrum, many went 'above and beyond' the usable wavelengths and established ways and means of exploiting it. The idea here is to include "light" as a 'band' to be used on field days.

Arithmetic or mathematics

The general view expressed by contesters over the past decade is that the multipliers should increase band-by-band. Is there a "fair" way to achieve this, reflecting the effort, time and money it takes to obtain gear for each? Difficult to answer. Then there's the practical aspect of calculation. The VK Log Checker uses a lookup table to work out scores from the band multipliers.

In the meantime, consider the table here. **Column 3** shows the current band multipliers, for comparison.

Column 4 multiplier values are in steps of the 16th root of 2 ($2^{1/16}$) from the previous number. In decimal form, this is an irrational number approximating 1.0442737824274 and continues infinitely, allegedly without repeating.

Using this relation means that the multipliers per band don't rise at an unmanageably steep rate, and it's a simple arithmetical calculation (with the noted exception of 6m). Note, 1.0442737824274 can be rounded-up to three decimal places without the 3rd place increasing by 1, to 1.045. Hence, I used 1.044 for the table.

Column 5 is a simplified version of Column 4's mathematics.

Column 6 is based on the musical scale, that is, the 12th root of 2 while the **last column** is based on the square root of 2.

Feedback would be appreciated to the email address heading this article.