



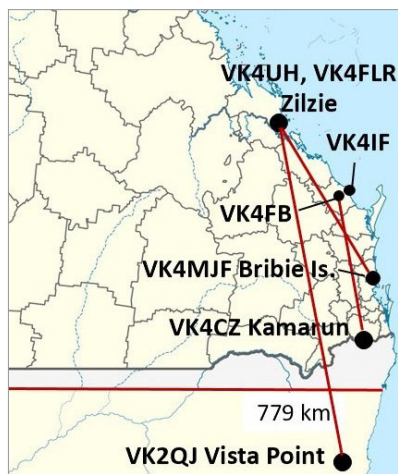
MAD winter days, making & breaking records

Kevin Johnston VK4UH, President Brisbane VHF Group, and WIA VHF-UHF Distance Records Manager

The winter months of the year have generally been considered the “off-season” for microwave activities. Weather conditions for activating from mountaintop locations can be less than inviting and some modes of propagation, especially tropospheric ducting – arguably the cornerstone of microwave DXing success, are at the lowest ebb for the year. Traditionally, many microwavers will use this time for shed-work and construction.

This year, however, members of the Brisbane VHF Group have methodically tested this premise, which has turned out to be another “well know fallacy.”

The BVHFG, like several other groups around VK, has coordinated a complete calendar of weekend Microwave Activity Days (MADs) throughout the year. In our case, we plan for around 8 to 10 MADs, all held on a Sunday and spaced across different months of the year.



Winter MADness! Locations and contact paths of the record-setting stations during the events. Note the recording setting 779 km QSO on te 9cm band (3.4 GHz).

We have been fortunate to rely on the organisational skills of Scott VK4CZ who has undertaken this task over recent years on our behalf. The dates are carefully selected in advance to avoid clashes with other contests, field days and meetings, etc, as well as other socially significant dates – Christmas, Easter, and Mother’s Day included.

During the months where VHF-UHF or the John Moyle Field Days occur we generally allow for these events to take the place of Microwave Activity Days.

MAD encouragement

The general intention of the MAD program is to encourage planned activity and the selection of portable locations etc, to maximise and rationalise the number of target stations available for contacts and to avoid multiple operators all appearing at the same location.

Pre-planning and prior consultation have proved invaluable in this regard.

To enhance activity we have also achieved consensus between activators on how best to achieve liaison during the activity days. In our case, we make extensive use of the South East Queensland Wide Area Network (SEQWAN), a chain of cross-linked 2m repeaters covering a large area of SE Queensland and Northern NSW.

Likewise, we also encouraged activating stations to invite other local operators to accompany them to portable sites to assist as a sidekick and experience the fun of microwaves.

This last winter season, we have deliberately taken this program “One Step Further.”

During the MADs, as a group, we have been following the practice of intentionally attempting a series of very long-distance paths, many across the VK2-VK4 state borders. Many considered several of the attempted paths as being near-impossible, particularly during the winter season.

Some paths attempted involved members driving very long distances to activate, often at considerable cost in terms of time and funds. Some thought that this was “MAD Madness!”

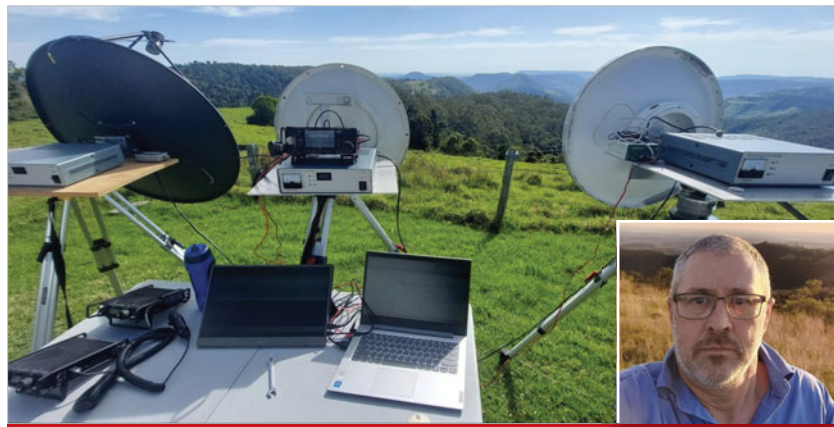
However, this experiment has proved to be very fruitful over recent months with several outstanding record-breaking microwave QSOs being achieved.

VHF-UHF Records history

As many will know, the WIA has maintained an historical archive of distance records achieved on all the bands above 50 MHz, dating back to 1947. These historical records have been maintained in date-order, even when superseded. The archive also records distance records on VHF-UHF bands that have since been withdrawn from the amateur service in Australia.

Microwave distance records can be achieved by portable and home stations, using traditional modulation (Phone and CW), or using digital modes.

Records are maintained at both a national level and on a State/Call Area basis for both phone and digital contacts, and on a band-by-band basis. The intention, and indeed purpose of all such records is to encourage and recognise achievement, to promote



The Microwave Activity Day (MAD) of 25 May drew Scott VK4CZ (inset) out to Kamarun Lookout in the Border Ranges. He worked Roland VK4FB portable at Barolin Lookout near Bundaberg on 5.7 GHz to set a new VK4 record . . which was broken the following day!

development and to challenge operators to attempt more and more difficult contacts.

In common with other sporting disciplines, the sole purpose of achieving records is that they be beaten.

So, reviewing the attempts and successes of the last few BVHFG MADs, here's what transpired.

Two key days

During the Microwave Activity Day held on **25 May 2025**, members of BVHFG (VK4UH, VK4UV), having travelled north to the Bundaberg region in Central Queensland, activated the club station VK4IF/p from the Hummock Lookout near Bundaberg.

On the same day, Graeme VK2QJ/p drove to Vista Point Lookout, near Grafton NSW. A series of contacts on the 2.4 GHz (13cm) and 3.4 GHz (9cm) bands between the two stations, over a distance of 588 km, achieved **six new records!**

Successful digital contacts on 13 and 9cm achieved **new National digital records** and both VK4 and VK2 **State digital distance records** on both of these bands.

During the next MAD on **13 June 2025** another **five records** were extended or created, including some set only a month earlier!

Firstly, an outstanding and record-breaking digital contact was

made between Frank VK4FLR, from his home station at Zilzie near Rockhampton in Central Queensland, down to Graeme VK2QJ who was again portable at Vista Point Lookout near Grafton in NSW on the 3.4 GHz, (9cm) band.

At 779 km distance, this contact represented a new National Digital distance record and both a VK2 and VK4 State Digital distance record for this band. The contact was made using the Q65-15B digital mode and was achieved via Aircraft Enhancement propagation.

During the same Microwave Activity Day, Scott VK4CZ, portable at Kamarun Lookout in the Border Ranges National Park, just north of the VK2-VK4 border, completed a digital contact on 5.7 GHz, our 6cm band, with Roland VK4FB, operating portable at the Barolin Lookout near Bundaberg in Central Queensland. Again, this contact was made using Q65-15b mode, but via tropospheric scatter propagation.

At a distance of 369 km, this contact represented a new VK4 State digital record for the 6cm band.

On the following day, this 5.7 GHz record was extended again by a contact between John VK4MJF at his home station on Bribie Island, near Brisbane in South East Queensland, up to the author, VK4UH, having driven to the Rockhampton area for the occasion. Operating portable at Zilzie in

Central Queensland, Q65-15b mode was used and the contact was achieved via Aircraft Scatter propagation.

This contact was also outstanding because, at the VK4MJF end, only 3 Watts was being transmitted from a barefoot transverter and a simple grid-pack antenna. The VK4 State Digital distance record on the 9cm band was extended by 113 km and now stands at 482 km.

It is hoped that results such as these will enthuse and encourage others to continue to activate microwave portable and home stations throughout the year. While it may be true that tropospheric ducting may be less common during the winter season, other modes of long-distance propagation, including Aircraft enhancement and rain scatter as examples, may in fact be enhanced.

More information on the WIA VHF-UHF Record program is available from the main WIA website, at: tinyurl.com/VUHFdx .

A complete update on recent records achieved will be published shortly.

Effort rewarded

Scott Watson VK4CZ was awarded the 2025 BVHFG "Presidents Prize" in recognition of his Meritorious Service to the group for the coordination of the Microwave Activity Day calendar and the 23-on-23 activity programme (for 23cm band activity). These are cornerstones of the Group's activities.



The 2025 Presidents Prize award from the Brisbane VHF Group deservedly went to Scott Watson VK4CZ.