

In the news from Amateur Radio New South Wales for this week;

VK2WI News continues with regular morning and evening bulletins throughout January; we would like to hear from you, if you are planning any activities for the holiday season. Just email the details and contact information, to news@arnsw.org.au. We also welcome reports on recent activities. General enquires can be directed to the ARNSW office via email, to office@arnsw.org.au, or by leaving a phone message on 02 9651 1490.

Later this month we will be making some changes to VK2WI News transmissions; 80 metre transmissions will change frequency, moving up the band, to 3695kHz; and 6 metre transmissions will move to the VK2RWI repeater, on 53.85MHz.

Tonight, we also welcome listeners on the EchoLink "HAM" conference, and the Australian & New Zealand EchoLink Network. Callbacks will also be taken after tonight's bulletin; our thanks to John VK3HJQ, and the Australian & New Zealand EchoLink Network team, for making this relay available.

RadNet Update

With some information about some changes coming up on the network, here's Matt VK2FLY;

[Play File: 15-B-RNT-5.wav]

Duration: 1m44s

In: The VKDMR Network...

Out:....For ARNSW RadNet.

[Transcript]

DMR Users among us will know that ARNSW's radio network runs on the VKDMR network. The VKDMR network has over 60 repeaters across Australia and hundreds of hotspot users. It really is an incredible resource for Australian Amateurs.

Over the coming months the Admins of VKDMR have decided to streamline the network. Their aim is to make the network easier to use, Radios easier to program and reduce load on solar powered repeater sites.

The changes to the network will be rolled out in two phases.

Phase one will commence tomorrow and the good news is you will not need to make any changes to your radios.

During phase one the only talk group that will automatically broadcast on all repeaters is 505. Which will become a call channel only.

All other talk groups will be user activated. So if you want to contact someone give them a call on 505 then move to one of the other user activated talk groups 3809-3010

On February 9 phase two kicks in. This is the time when you will need to reconfigure your radios. There will be updates on how to do that on the vkdmr.com web site and also on the RadNet micro site at arnsw.net.

We will let you know more information about phase two as it approaches. In the mean while don't forget that ARNSW's Radnet is expanding all the time so if your local NSW amateur group is interested in joining and would like one of our repeaters on your hilltop. Please email us on dmr@arnsw.org.au

This has been Matt VK2FLY for ARNSW RadNet.

Weekly Solar and Geophysical Report

For the period of the 30th of December to the 5th of January.

First, the summary of activity;

Dates across the columns are	30 th	31 st	1 st	2 nd	3 rd	4 th	5 th
10cm Flux	162	165	153	146	149	151	154
Fredericksburg A-Index (AFr)	22	10	9	5	5	17	6
Australian Index (Aaus)	19	10	10	5	4	13	8 estimated
T index	104	68	112	120	119	124	88

Solar activity reached R1 levels on the 30th with two M-class flares; M1.4 at 1528UTC, and M3.7 at 1938UTC. Activity remained below warning level on other days. Geomagnetic conditions also reached G1 warning level on the 30th, with quiet to unsettled conditions on other days.

F2 critical frequencies in Southern Australia were mostly near predicted monthly values. The 31st saw depressions of 15% during local daylight hours. The 1st and 2nd of January were enhanced 15% during local night, and the 3rd was enhanced 20% during local night. The 4th was enhanced 20 to 25% all day, however the 5th saw return to predicted levels with some brief depressions after local dawn.

The forecast, issued on the 6th of January, through until the 12th;

Solar activity is expected to be at R0 levels, with some periods of R1 activity and a chance of R2. Geomagnetic conditions should remain quiet to unsettled, with a chance of G1 disturbance on the 8th.

MUFs in Southern Australia are likely to be near predicted to 15% enhanced. However, an increased chance of shortwave fadeouts during this week and Mild degradation possible on the 8th.

Data courtesy of the Australian Space Weather Forecasting Centre.

Space Weather Summary for December 2022

Compiled with data from the Australian Space Weather Forecasting Centre

December saw an increase in low-level solar flare activity, with a total of 41 R1 and 2 R2 flares; the largest flare for the month was an M6.3 on the 14th. Despite the high number of flares observed this month, none were associated with significant coronal mass ejections or solar proton events. The bulk of the months flare activity was produced by solar region AR3165, from the 14th to the 16th. The region rotated off on the 17th, and although due back to the southeast solar limb on the 31st it did not reappear.

A solar filament located in the solar northeast quadrant erupted on the 24th; this was associated with a weak, partially Earth-directed coronal mass ejection. High speed wind streams from coronal hole activity, caused elevation of solar wind speeds from the 1st to the 4th; 7th to 13th; 23rd to 27th and the 30th of December.

There were no significant geomagnetic storm days for the month, with only some mild disturbances were induced by coronal hole wind streams. Regional geomagnetic field disturbance reached G1 warning level on the 26th and 30th, with the Australian region A index reaching 17 and 19 respectively. The 30th was the most disturbed day of the month with the planetary Ap index reaching 31.

Mild to moderate ionospheric depressions observed during the month were generally associated with increases in geomagnetic activity. Frequent sporadic E was observed at middle latitude sites. No ionospheric scintillation events were observed.

Shortwave fadeouts impacting lower HF frequencies were observed on the 15th, 16th and 27th, associated with solar flare activity. The ionosphere had a positive response on the 27th following overnight geomagnetic activity, with enhancements of up to 50% observed at some sites. However, it was short-lived; the on the 28th, the Southern Australia region saw MUF depressions up to 20%.

Australian T-index average for the month was 84.

Foundations of Amateur Radio

This series, written and produced by Onno VK6FLAB, continues a weekly examination, of the building blocks of Amateur Radio.

[Play File: 16-FOAR030.wav]

Duration 3m28s

In: "Foundations of Amateur Radio ..."

Out: "I'm Onno VK6FLAB"

For more information about this series, including audio, transcripts and other useful amateur radio resources, Onno's website is; vk6flab.com; you can follow him on Twitter, @VK6FLAB; and you can contact Onno by email, to cq@vk6flab.com.

[Play File: 17-E-ID2.wav]

WICEN News

Weekly voice nets continue at 6pm Sunday, on either the Chatswood 2 metre repeater, or the Kurrajong 70cm repeater, please check the website for details.

WICEN NSW, is a communications support squad of VRA Rescue NSW, the web address is nsw.wicen.org.au, on twitter @wicennsw, and on Facebook.

For information about other WICEN groups; WICEN ACT is part of the Canberra Region Amateur Radio Club. Their website includes WICEN and general Club information and can be found at www.crarc.org.au. WICEN Victoria has a weekly net on Tuesday at 8:30pm, on 3.6MHz. More details on the web at vic.wicen.org.au.

ARRL DX news

January sees the World Radiosport Team Championship (WRTC) special event, which was postponed from 2022. Special stations on air for this event include;

CHINA; with station BY1CRA/WRTC

INDONESIA; with 8B0RARI

NEW ZEALAND; with ZL6WRTC

And SAUDI ARABIA, where Samir, HZ1SK will be active as HZ1WRTC.

...and in other DX activity for this week;

AUSTRALIA; Special event station VI75G is active throughout 2023, celebrating the 75th anniversary of the Geelong Amateur Radio Club.

INDIA; Special event station AT18BSG is active until January 15 celebrating the 18th National Jamboree of the Bharat Scouts and Guides.

KENYA; Scott, WA5A is active as 5Z4/WA5A and is active on 40, 20, 17, and 10 metres.

QATAR; Anton, RN1B is active as A75GC from Doha until the end of the month. Activity is in his spare time on the HF bands using CW and SSB.

CAPE VERDE; Harald, DF2WO is active as D44TWO from Sao Tiago, IOTA AF-005, until January 21. Activity is on 160 to 6 metres using CW, SSB, FT8, and FT4, as well as on Satellite QO-100.

FEDERAL REPUBLIC OF GERMANY; Special event call sign DB100RDF is active during all of 2023 to celebrate the 100 years of radio broadcasting in Germany.

PHILIPPINES; Marc, ON5SM is active as DU9/ON5SM from Mindanao, IOTA OC-130, until January 21. Activity is on the HF bands using SSB, SSTV, and FT8.

KYRGYZSTAN; Bob, WT3A is active as EX0ET from Bishkek. Activity is on 20 to 10 metres.

FRANCE; Special event station TM80NT is active until January 15 to commemorate the 80th anniversary of the death of inventor, engineer, and futurist Nikola Tesla.

CROZET ISLAND; Station FT8WW is active until January 26.

WALLIS AND FUTUNA ISLANDS; Darren, VK4MAP is active as FW/VK4MAP until the middle of January. Activity is holiday style on 80, 40, 20, 15, and 10 metres using SSB.

SCOTLAND; Special event station GB2KW is active until January 28 near Inverness using vintage equipment.

NORWAY; Special event station LA100K is active from Trondheim during all of 2023 to commemorate 100 years of the Akademisk Radioklubb, one of the oldest amateur radio clubs in the country.

LITHUANIA; Special event station LY700VLN is active during January to celebrate 700 years of the capital city of Vilnius.

BONAIRE; Jeff, WA2BOT is active as PJ4/WA2BOT. He will also be active as PJ4JP during the ARRL RTTY Roundup.

SWEDEN; Special event station 8S80AA is active throughout 2023 to celebrate the 80th anniversary of the Vasteras Radio Klubb, SK5AA.

CONGO; A group of operators are active as TN8K until January 21. Activity is on 160 to 6 metres using CW, SSB, RTTY, PSK, FT8, and FT4. This includes being active on Satellite QO-100.

GABON; Roland, F8EN is active as TR8CR from Libreville until March 15. Activity is on 30 to 10 metres using CW.

THIS WEEKEND ON THE RADIO. The ARRL RTTY Roundup, ARRL Kids Day, NCCC RTTY Sprint, QRP 80-Metre CW Fox Hunt, NCCC CW Sprint, K1USN Slow Speed CW Test, PODXS 070 Club PSKFest, Marconi Club ARI Loano CW QSO Party Day, SKCC CW Weekend Sprintathon, World Wide PMC Contest, RSGB AFS CW Contest, Original QRP Contest, EUCW 160-Metre CW Contest and the DARC 10-Metre Contest are all scheduled for this weekend.

K1USN Slow Speed CW Test, 4 States QRP Group Second Sunday Sprint, ICWC Medium Speed CW Test, OK1WC CW Memorial, Worldwide Sideband Activity Contest, QRP 40-Metre CW Fox Hunt, Phone Weekly Test, A1Club AWT, CWops Test, VHF-UHF FT8 Activity Contest, Mini-Test CW 40 and Mini-Test CW 80 are all on tap from January 9 to 11.

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Club News

We start this week, with news from the Oxley Region Amateur Radio Club. Yesterday saw the Club's first, Monthly General meeting for 2023. The first Coffee Morning for 2023 is on this coming Thursday the 12th of January, at Brooklyn's Burger Bar, Thrumster. Copies of the Club's 2023 calendar will be available at the morning. Coffee Mornings are an informal catch up, on the second Thursday of each month.

The VK2RCN 2-metre repeater is operating temporarily from the new Telegraph Point site, as the 70cm FM voice repeater, temporarily on 438.525MHz. This will be replaced by the RadNet DMR repeater early in the New Year. Several very intensive working bees during the past week have seen work progressing rapidly; the site will be formally commissioned later in the month, once fitout of the equipment shelter has been completed and all the VK2RCN repeaters have been permanently installed and tested.

Candidates wishing to undertake Foundation training and assessment early in the new year, or an assessment for Standard or Advanced licences, can contact the club at PO Box 712 Port Macquarie NSW 2444, or via the contact form on the website.

There are two club nets each week; the mid-week net starts at 7:30pm on Thursday nights, and the weekend net starts at 9am Sunday mornings. Both nets are on the VK2RPM 2 metre repeater, 146.7MHz with a 91.5Hz sub-audible tone for access, and on EchoLink as VK2RPM-R. Members and visitors are encouraged to participate in the club on air nets as often as possible.

For more information about the Oxley Region Amateur Radio Club, visit the website at orarc.org. The site contains a wealth of Amateur Radio items in addition to club information. The November 2022 edition of the club's bimonthly newsletter "Oxtales" is now online, with past issues are on the website as well. The January 2023 issue is in preparation and will be published later in the month. You can also find the Club on Facebook; just search for Oxley Region Amateur Radio Club.

*Advised by Henry VK2ZHE
For the Oxley Region Amateur Radio Club.*

Central Coast Amateur Radio Club

The Club's Kariong Clubrooms will be reopening next weekend, on Saturday the 14th of January, from 10am.

Mayham will not run this year – the event group are refocusing and re-aligning the direction of the event, and hope to return in 2024.

The third “Christmas Ham” event has been postponed, and will now take place in the first quarter of 2023.

At VK2RAG Somersby, 23cm is now back online. D-Star, RadNet DMR and 2m EchoLink services are fully functional; and BrandMeister DMR and 70cm EchoLink and IRLP are still on the sick list.

The Somersby WebSDR is online at websdr.ccarc.org.au; its configured to listen on 6 metres, 2 metres, 70 centimetres and 23cm.

The Morning Tea net returns from Tomorrow, the 9th of January; is on 10am weekdays on the VK2RAG 2 metre repeater - 146.725MHz with a 91.5Hz sub-audible tone, and on the CCARCNSW and HAM EchoLink conferences.

The Thursday Evening Net will return later in the month.

You can find out more about the CCARC, including information on upcoming social events and all the details we can't tell you about here; on the web at ccarc.org.au – by phone, 02 43402500 – or social media, search Central Coast Amateur Radio Club; remember to “like” to follow for updates.

73 Alan VK2MG

Publicity Officer, Central Coast Amateur Radio Club.

Sydney ATV Group

The Group's ATV repeater at Lawson in the Blue Mountains, transmits high-definition TV on 445.50MHz, with analogue and digital inputs on 23cm.

Reception is possible over the Sydney Metro area, or via the British Amateur TV Club streaming web site; select VK2RTS Sydney. You can also text to say that you're watching – just enter /nick, a space then your name, your following text will appear in the column above.

Regular nets are on Monday evenings starting at 7:30pm. We regularly have technical talks, show our latest projects, general interest videos and much more.

You can call in during the net on the Lawson repeater, 147.325 MHz with positive offset, with reports, questions or help with receiving Amateur Television. Why not join in and find out more about this fascinating and fast-growing aspect of digital amateur radio.

*Advised by John VK2ATU
on behalf of the Sydney ATV Group.*

Manly-Warringah Radio Society

The Society would like to wish everyone a Happy New Year. This year is a special one for the Society, marking 100 years since the establishment of the Manly and District Radio Club in February 1923.

To mark this anniversary, the Society will be activating the Special Event Callsign, VI100MB, starting late next month. More details will follow in the coming weeks, but in the meantime, you can check out VI100MB on QRZ dot com.

Regular VK2WI listeners may have noticed the Society's "Early Bird" net in the "Activities of the Air" list. This past week saw the 15,000th Early Bird net, which started in December 1981. Hopefully the net will continue for a long time to come!

The Manly-Warringah Radio Society meets every Wednesday evening at the First Terrey Hills Guides Hall, Beltana Avenue, Terrey Hills. Doors open at 7.30pm for an 8pm start. If you need directions, call in on the society's 2 metre repeater on 146.875, or check the web site for details; the address is mwrs.org.au.

*73 Richard VK2SKY
MWRS Publicity Officer*

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Activities on the air

Daily;

Manly-Warringah “early bird” net, 6:30am on or near 3690kHz LSB; if that’s too early, the “morning” net is from 8am on or near 7189kHz.

Amateur Radio Central West Group lunchtime net; 1pm on VK2RCW.

The **CCARC Morning Tea net** back tomorrow, on *weekdays* from 10am; VK2RAG, 146.725MHz with 91.5Hz tone, also on EchoLink.

Mondays;

Westlakes ARC nets 9:30am on 40 metres, 7115kHz, VK2ATZ Portable.

Great Lakes Radio Club net 7pm on VK2RGL; 147.1MHz with 91.5Hz tone, EchoLink VK2RGL-R.

Hunter Radio Group VK2AWX News 7:30pm, 146.9Mhz and 438.025MHz.

Sydney ATV Group net 7:30pm; call in on 2m repeater 147.325MHz.

Amateur Radio Central West Group net at 8pm on VK2RCW.

Lightning Net 8pm on 1860kHz, net control Steve VK2STG.

HADARC net 8pm on VK2RNS, 147.25MHz, also available via EchoLink.

Waverley ARS net 8pm now back on VK2RBV, 438.1125MHz with 91.5Hz tone. Activities online and on air; see website.

Tuesdays;

Blue Mountains ARC net from 8pm on 3543kHz.

Illawarra ARS 80m net at 8:30pm, 3666kHz.

Wednesdays;

Westlakes ARC net 9:30am on 7115kHz.

HADARC 8pm on 3608.5kHz

Blue Mountains ARC 8pm on VK2RBM, 147.05MHz with 123Hz tone.

Amateur Radio Central West Group from 8pm on 3653kHz.

Thursdays;

Fishers Ghost ARC net from 7:30pm on VK2RFG, 438.65MHz with -7MHz offset and 91.5Hz tone; also, on EchoLink.

Oxley Region ARC from 7:30pm on VK2RPM 146.7Mhz with 91.5Hz tone.

St George ARS 8pm on VK2RLE 146.8MHz.

Fridays;

Morning tea with HADARC at 9am on 7106kHz.

Westlakes at 9:30am on 7115kHz.

Amateur Radio Central West Group at 8pm on VK2RCW.

Saturdays;

Illawarra ARS net 9:30am on VK2RMP 146.850 and VK2RUW on 146.675.

Snowy Mountains ARC net 7:30pm on Southeast network; VK2RFS 146.75MHz, VK2RSE 147.375, VK3RDH 146.625, and EchoLink.

Westlakes Stone the Crows net; 6am on 3588kHz.

Sundays;

Oxley Region ARC from 9am, VK2RPM 146.7Mhz with 91.5Hz tone.

Westlakes DMR Net from 8:30am on Talkgroup 8. 2 Metre nets throughout the week, see website for details.

WICEN NSW nets from 6pm on Chatswood 2m or Kurrajong 70cm repeater; see website for details.