

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

Later in this bulletin, we have a summary of on-air activities from both Sydney, and across New South Wales. We welcome any updates from clubs and groups; simply email news@arnsw.org.au – we don't need full items, just the details of the activity and contacts. We also welcome reports on the outcome of recent activities.

You can direct any general enquires to the ARNSW office via email, to office@arnsw.org.au, or by leaving a phone message on 02 9651 1490.

Tonight, we again 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.

Coming soon to VK2WI News...

Is a new segment, in which you can take part.

We know that Amateur radio is a diverse pursuit with so many areas of activity. But, sometimes, it can be hard to know where to start.

Say you're interested in starting something new... perhaps contesting or setting up a digital hotspot, but you don't really know where to begin.

Where do you look? Who can you ask?

Connector!

Connector is a new segment coming soon to VK2WI News, where we connect your questions with answers from fellow amateurs that have been there and done that.

Now, it's on the radio, so we want to hear from you.

You can call and leave your question on the special connector phone line, 02 9444 0181; or you can attach a recording of your question in an email to; connector@arnsw.org.au.

So, to hear some practical answers, stay tuned for *Connector*, coming soon to VK2WI News.

Weekly Solar and Geophysical Report

For the period of the 4th to the 10th of November;

This report issued on the 11th of November.

First, the summary;

Dates across the columns are	4 th	5 th	6 th	7 th	8 th	9 th	10 th
10cm Flux	118	131	131	135	132	138	139
Fredericksburg A-Index (AFr)	12	8	3	12	8	8	2
Australian Index (Aaus)	9	5	1	14	5	2	1 estimated
T index	68	77	84	95	75	78	90

Solar activity was low except for the 7th, with an M5.2 flare at 0011UTC, reaching R2 warning level. Geomagnetic activity reached G1 warning level, also on the 7th, with quiet to unsettled conditions on other days.

F2 critical frequencies in Southern Australia were mostly near predicted, with some depressed periods; 20% during local day on the 5th, 15% during local day on the 6th and 8th, and 20% during local day on the 9th.

The forecast for the 11th to the 17th of November;

Solar activity may reach R1 or R2 levels from the 11th to the 15th withle two currently active regions remain on the solar disk.

Geomagnetic conditions are expected to be quiet.

MUFs are expected to be near predicted monthly values, with a chance of shortwave fadeouts.

Data courtesy of the Australian Space Weather Forecasting Centre.

Space Weather Summary for October 2022

Compiled with data courtesy of Space Weather Services

The largest solar flare for the month X1.0 on the 2nd of October, resulting in an R3 warning level. Proton flux observed by the GOES satellite was mildly enhanced on the 1st and 2nd due to the flaring activity.

There was also a total of 18 M-class flares, resulting in warnings at R1 or R2 level. All of the major flare activity occurred in the first half of the month, with the final R1 flare occurring on the 14th, just before active region AR3112 rotated off the solar disk.

Several coronal holes were observed over the month; the largest impact from high-speed wind stream effects occurred on the 22nd, with the planetary A index reaching 25, and on the 29th, reaching 24. The majority of CMEs in October were not geoeffective; a period of G1 geomagnetic conditions on the 3rd was likely due to combined effects of a coronal hole high-speed wind stream and a CME impact.

Geomagnetic activity in the Australian region was generally at quiet levels. Disturbance reaching G1 level was observed on the 22nd. Minor increases on other days were due to high-speed wind stream effects, in the Australian region, this activity was below G1 warning threshold.

The largest ionospheric depression for the month, 35% below predicted MUF, was observed on the 23rd of October, following coronal hole induced geomagnetic activity. Isolated periods of lower-than-normal MUFs were observed throughout the month, mainly in association with geomagnetic activity.

Spread-F was frequently observed during local night hours in Southern Australian regions. Sporadic E was also observed at some sites throughout the month.

Shortwave fadeouts were observed in the Australian region on the 2nd and the 3rd, due to M-class flare activity. Regional monthly T-index was 69; T-index values were above monthly values for the first half of the month, falling slightly below the monthly values for the second half of the month.

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: 15-FOAR016.wav]

Duration 2m56s

In: "Foundations of Amateur Radio ..."

Out: "I'm Onno VK6FLAB"

For more information about this series, including transcripts and useful resources for F-calls, Onno's website is; vk6flab.com, or follow him on Twitter, @VK6FLAB; and you can contact Onno by email, to cq@vk6flab.com.

[Play File: 16-E-ID2.wav]

WICEN News

WICEN voice nets continue at 6pm on Sunday, on either the Chatswood 2 metre repeater, or the Kurrajong 70cm repeater, please check the website for details; and the new state-wide 40m net, starting at 6:30pm on 7110kHz. Net control is VK2WIZ.

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

MALAWI; Don, K6ZO is once again active as 7Q6M until November 29. Operation is on 160 to 6 metres.

GHANA; Dave, AB0GC is active as 9G1SD from the Wenchi, Brong Region. Activity is on 17 to 6 metres using FT8 and FT4 at various times during the day.

TONGA; Stan, LZ1GC and Ivan, LZ1PM are active as A35GC from Tongatapu, IOTA OC-049, until November 20. Activity is on 160 to 6 metres using CW, SSB, RTTY, and FT8.

ARUBA; Jaap PA7DA, will be active as P40DA until November 27. Operation during his spare time on HF.

URUGUAY; Special event station CX100B is active until November 30 to celebrate the 100th anniversary of Radio Paradizabal, which first began broadcasting on November 2, 1922.

GUINEA BISSAU; Carlos, CT2GQA is once again active as J5JUA until the end of 2022.

THAILAND; Lars, SM6NT is active as HS0ZME from Hua Hin and is there until April 2, 2023. Activity is on 40 to 10 metres using mainly CW.

BRAZIL; Special event station ZW200ESQ is active until November 30 to celebrate the bicentennial of the Brazilian Navy. Activity is on 80 metres to 70 centimetres using CW, SSB, various digital modes, and on the FM Satellites.

GREECE; A group of operators are active as SX22HAF until November 30 to celebrate Hellenic Air Force Day. Activity is on all bands using CW, SSB, and various digital modes.

BANABA ISLAND; Members of the Rebel DX Group are active as T33T until November 15. Activity is on 160 to 6 metres using FT8 in DXpedition mode.

PALAU; A group of operators are active as T88WA from Koror Island, IOTA OC-009, until November 14. Activity is on 160 to 6 metres using CW, SSB, and FT8.

MALI; Jeff, TZ4AM is active from Bamako and is active on 40 to 6 metres using CW and SSB.

ST. HELENA; Christopher, HB9FIY will be active as ZD7CA until November 26. Activity will be in his spare time on 40 to 10 metres using SSB, PSK31, and RTTY.

Club News

We start this week with news from the Oxley Region Amateur Radio Club;

At last Saturday's meeting, Paul VK2ICQ delivered a very interesting and informative presentation on the GRN, now called the PSN, and P25 trunked radio reception. There will be articles on this presentation, and on Paul's ADS-B presentation, in November Oxtales. Last Thursday saw a group of members enjoy the club's informal Coffee Morning at Thrumster; there was much interesting discussion, continuing through until lunchtime.

The next meeting of the Club is a Friday night get-together, at 7pm on the 18th of November, in the SES building at Port Macquarie.

The VK2RCN Telegraph Point repeaters will soon return to air, operating from the new site. With work progressing well, commissioning is expected later this month.

Candidates for the next Foundation training and assessment weekend, as well as those interested in assessments for Standard and 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 the club information. The September 2022 web edition of the club's bimonthly newsletter "Oxtales" is now online, and past issues are on the website as well. The November issue is in preparation and will be published soon. 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 Clubrooms at Kariong are open every Saturday, from 10:30am.

November 26 is the next regular “Show & Tell” Saturday at the Clubrooms; Bring along anything radio or electronic that you think may be of interest, or just come along to see what others have brought.

The first of the club’s “Christmas Ham” events kicked off on the 10th of November, and runs through until midday on November 24. To find out more, visit the Club’s website or social media.

At VK2RAG Somersby, the D-Star, RadNet DMR and 2m EchoLink services are fully functional; 23cm is temporarily down; 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 Club’s Morning Tea net continues at 10am daily, and after VK2WI News on Sunday mornings; the Club’s weekly net is on Thursday night from 8pm. Both nets are on the VK2RAG 2m repeater – 146.725 MHz with 91.5Hz tone, and on the EchoLink HAM and CCARC conferences.

The Thursday night net is also video streamed live on the club’s Facebook page and recordings can be found in the “Videos” section.

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 page – 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.

[Play ID File: 18-E-ID3.wav]

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

This Wednesday is lecture night at the Society, with guest speaker Andy Bawley, on the topic of Semiconductor Manufacturing in Australia.

Andy is the recently-retired General Manager of Silanna Semiconductor, the only commercial semiconductor manufacturer in Australia. Silanna began life as AWA Semiconductor 60 years ago, and Andy has been there for 55 of those years!

Come along to hear the history of Australian semiconductors and then gain some insight into the future of the industry.

[web site: silanna.com]

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*

Waverley Amateur Radio Society

The next meeting is at 7:30pm this coming Wednesday, November 16th, in the Anzac Room of the Rose Bay RSL Club, Vickery Avenue Rose Bay.

Come along and learn what's been happening with the Society's repeaters recently. Many members partake of dinner in the club's bistro prior to the meeting and all are welcome; they especially welcome any visitors from other clubs or out of town.

At the next project day, Saturday the 3rd of December, there's a practical Surface Mount Soldering instruction session. If you haven't yet indicated your interest in this event, please do so ASAP at the link on the society's website, <https://vk2bv.org>, to allow planning of quantities needed on the day

Due to the current issues with the VK2RBV repeaters, the society's nets are temporarily being held from 8pm on the VK2ROT repeater on 147.025 MHz with a 91.5Hz CTCSS tone for access.

Other activities of the club are continuing either in person and sometimes on Zoom. See the society's website for details.

The Wednesday lunchtime get togethers, from midday are back on in the RSL bistro. There have been good rollups to them, and there will shortly be facilities to continue them in the ANZAC room, along with some practical activities as well.

You can keep up to date with the Waverley Amateur Radio Society on the web, at vk2bv.org. On the site you can also find out more about kits available, update your membership details, and use the contact form to get in touch for more information.

*73 from Eric VK2VE
Broadcast Publicity Officer*

Hornsby and Districts Amateur Radio Club

Last week saw HADARC Members participate in the “Great November Recalibrate”, using Top-of-the-line test gear to accurately check Voltage, Current and Resistance. The line-up included a Fluke 1664FC meter accurate to 10 milli-ohms and also a Yokogawa CA-11E care of Walter VK2WB as a very accurate way to source voltage. We put our meters to the test and found that our Fluke multi-meters were indeed very accurate, but others may round up or round down and are less accurate.

We had a lot of fun measuring a Power supply with a build-in digital voltage display, from a well-known electronics retailer. Using 5 separate multi-meters to check the voltage, gave... 5 different results. Three of the well-regarded brand-name meters were very close to one another, but in all cases the display on the power supply itself, was over-stated. It might be worth checking the voltages on your power supply at home; see if you're really getting your 13.8Volts.

Resistance testing of leads was an eye-opener; while good leads read close to zero, some poorer leads had 1.4 ohms resistance. Maybe its time to re-solder and resolve those losses prior to Christmas; check your leads today.

At the next monthly meeting, HADARC will enter the realm of Aerospace engineering, with a real Rocket Scientist; Alexander Ryan is an Aerospace Engineer and CEO of VXB Aerospace. He is in the final stages of his PhD in Aerospace Engineering and Physics at the University of Sydney.

Alex designs electric propulsion systems and has previously developed and tested a small RF plasma thruster. His UHF engineering and plasma skills are cutting edge. He will present where Australia stands in the ever-growing Aerospace Industry. This is a great way to introduce people to radio with a great talk; HADARC welcomes Members and guests to attend all its meetings.

You can also keep Radio-active on HADARC's weekly nets; Monday nights on VK2RNS, Wednesday night on 80 metres 3608.5kHz, and Morning Tea with HADARC every Friday on 40 metres, 7106kHz.

*73 Matt VK2BAI
HADARC President.*

[Play ID File: 19-E-ID4.wav]

Activities on the air

Daily;

The **CCARC Morning Tea net** at 10am, after VK2WI News on Sundays. VK2RAG, 146.725MHz with 91.5Hz tone, also on EchoLink.

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

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 temporarily on VK2ROT, 147.025MHz 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.

Central Coast ARC net 8pm on VK2RAG.

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 statewide HF net at 6:30pm on 7110kHz +/- other traffic. Net control VK2WIZ.