

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

While the VK2WI Dural site is currently closed to visitors; with public health orders changing, we are planning to re-introduce some on-site activities. In the meantime, you can still make contact via email, to office@arnsw.org.au, or by leaving a phone message with the office, on 02 9651 1490.

We wish to remind our listeners of some telephone services that are currently available if you have health concerns – the National COVID hotline is 1800 020 080, providing general advice; if you are feeling unwell, Healthdirect is on 1800 022 222. Both services are available 24 hours a day; and are a free call from most telephone services.

Later in this bulletin, we have a summary of on-air activities from Sydney and across the state. We would welcome any updates from club and groups especially regarding changes to activities or planned events. You can email news@arnsw.org.au – we don't need full items, just the details of the activity and contacts. As always, we also welcome reports to follow up on the outcome of recent activities, which we can report to our listeners.

Tonight, we again welcome listeners on the EchoLink "HAM" conference, and the Australian & New Zealand EchoLink Network. Callbacks will also be taken tonight on the network after the bulletin. Our thanks to John VK3HJQ and the Australian & New Zealand EchoLink Network team, for making this relay available to VK2WI News.

Weekly Solar and Geophysical Report

For the period of the 3rd to the 9th of December;

This report issued on the 10th of December.

First, the summary;

| Dates across the columns are | 3 rd | 4 th | 5 th | 6 th | 7 th | 8 th | 9 th |
|------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 10cm Flux | 85 | 88 | 83 | 80 | 79 | 77 | 77 |
| Fredericksburg Index (Afr) | 4 | 7 | 6 | 6 | 3 | 4 | 2 estimated |
| Australian Index (Aaus) | 5 | 5 | 6 | 5 | 3 | 2 | 1 estimated |
| T index | 5 | 18 | 17 | 7 | 8 | 12 | -1 |

Solar activity was very low on the 3rd and low on the 4th, becoming moderate on the 5th with an M1.4 flare at 0719UTC. The 6th returned to low activity levels, with very low activity observed from the 7th to the 9th.

Geomagnetic activity was at quiet to unsettled levels from the 3rd to the 6th, then quiet from the 7th to the 9th.

F2 critical frequencies in Southern Australia, were mostly near predicted values, with some depressed periods. Depressions of 20% were observed after local dawn on the 5th, 15% during local day on the 6th, and 20% all day on both the 7th and 9th.

Now, the forecast for the 10th to the 16th of December;

Solar activity is expected to be very low with no sunspots currently on the visible solar disc.

Geomagnetic activity is expected to be at quiet to unsettled levels with Active conditions possible from the 10th to the 12th, due to CME effects.

Maximum Usable Frequencies are likely to be up to 25% depressed for both southern Australia and Antarctic regions, due to both low levels of EUV ionization, and additionally some elevated geomagnetic activity.

Data courtesy of Space Weather Services.

Solar Flux Index update

Here are the updated Solar Flux Index (SFI) figures, last updated on the 30th of September;

Having finished November, we had a;

Minimum of 78, Average of 87 and a Maximum of 103
With peak dates from the 1st to the 11th and the 25th to the 30th

So far for December, we are expecting a;

Minimum of 77, Average of 84 and a Maximum of 90
With peak dates from the 1st to the 5th and the 19th to the 28th.

And looking ahead to January 2022, we are expecting a;

Minimum of 80, Average of 84 and a Maximum of 87
With peak dates from the 13th to the 24th.

Update with thanks to Noel, VK2FUL.

[using daily data updates from:

<http://www.swpc.noaa.gov/products/usaf-45-day-ap-and-f107cm-flux-forecast>]

Space Weather Summary for November 2021

Complied with data courtesy of Space Weather Services

Solar activity was predominately at very low to low levels for the month, with three low-level M-class flares, and no X class flares. The largest flare was M2 on the 9th; it was located to the far west of the solar disk and the associated coronal mass ejection (CME) was not Earth-directed. The M1.5 flare the 1st was also associated with a CME. The M1.7 flare on the 2nd was associated with an Earth directed full-halo CME.

Elevated solar wind speeds due to CMEs, and coronal hole high-speed wind streams were observed on the 1st, 2nd, 5th, 15th, 22nd and 23rd. Minor enhancements of solar proton flux were observed between the 1st and the 3rd, but not alert was issued.

The geomagnetic field in the Australian region saw the strongest disturbance for the month on the 4th of November due to a CME. The local A index reached 33, representing major storm level with an alert issued. Auroral sightings were also reported. Brief isolated minor storm periods were also observed on the 3rd and 6th.

The Australian regional ionosphere saw some depressed periods during the month; the largest depression, of 40% below monthly predicted MUF, was observed on the 5th following CME induced geomagnetic activity on the 4th. A broad period of lower-than-normal MUFs was observed in the Southern Australian region between the 11th and the 23rd; this was in association with weak solar flux emission and at times mild geomagnetic activity. Minor short-wave fadeouts, impacting lower frequencies, were observed on the 1st and 2nd of November.

What use is an F-call?

Tonight, we continue with this series, written and produced by Onno VK6FLAB. Each episode looks at different aspects of the diverse hobby of Amateur Radio.

[Play File: 15-FCAL193.wav]

Duration 1m26s

In: "What use is an F-call?"

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.

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

ARRL DX news

SENEGAL; Dani, EA4ATI is active as 6W1TG from Dakar, on 80 to 10 metres using mainly SSB.

MALDIVES; Tor, DG7RO will be active as 8Q7RO from Fihalhohi Island, IOTA AS-013, until December 27. Activity will be mainly on Satellite QO-100.

ZAMBIA; Mario, IK1MYT is active as 9J2MYT from Lusaka until June 2022. Activity is on 40, 20, 17, 15, and 10 metres.

QATAR; Special event stations A721FAC and A721FCA are active until December 18 during the FIFA Arab Cup 2021.

SPAIN; Pascual, EA5WO is active with special event callsign AN5OKW from Torrent until December 20, to commemorate the 80th anniversary of the Battle of Moscow. Activity is on the HF bands using various digital modes.

THAILAND; Brad, VK2BY will be active as HS0ZNR from the Nam Yuen district until January 21. Activity will be on 160 to 10 metres.

SAUDI ARABIA; Some members of the Saudi Association of Radio Amateurs are active with special event station HZ19SAT until December 28, as part of a Saudi Satellite Event.

FINLAND; Finnish amateur radio operators are allowed to use the prefix OF until December 23 to celebrate the 100th jubilee of the Finnish Radio Amateur Society, SRAL.

WESTERN SAHARA; The Sahrawi Amateur Radio Union special event callsign S0S/[S-zero-S] is active from Tifariti. Activity is on 40, 17, and 10 metres using SSB.

BANGLADESH; Station S21DX is active from Manpura Island, IOTA AS-140, until December 16. Activity is on the HF bands using SSB and FT8, and on Satellite QO-100.

SLOVENIA; Special event station S522PMC is active until January 2 to promote the PMC Contest.

KAZAKHSTAN; Special event stations UN30RK, UP30RK, UO30RK, and UQ30RK will be active until December 19, to commemorate the 30th anniversary of Kazakhstan's independence.

BURKINA FASO; Harald, DF2WO is active as XT2AW from Ouagadougou until December 20. Activity is holiday style on 160 to 6 metres using CW, SSB, and various digital modes.

THIS WEEKEND ON THE RADIO; ARRL 10-Metre Contest, NCCC RTTY Sprint, QRP 80-Metre CW Fox Hunt, NCCC CW Sprint, K1USN Slow Speed CW Test, PODXS 070 Club Triple Play Low Band Sprint, TRC Digi Contest, SKCC Weekend CW Sprintathon, ARI 40/80 Contest, International Naval Contest, QRP ARCI Holiday Spirits Homebrew Sprint, and CQC Great Colorado CW Snowshoe Run are all on for this weekend.

The 4 States QRP Group Second Sunday Sprint, OK1WC Memorial, Worldwide Sideband Activity Contest, RTTYOPS Weeksprint, NAQCC CW Sprint, QRP 40 Metre CW Fox Hunt, Phone Fray and CWops Mini-CWT Test are all scheduled for December 13 to 15.

WICEN News

WICEN weekly voice nets are on Sunday evenings, starting at 6pm, on either the Chatswood 2 metre repeater, or the Kurrajong 70cm repeater. Please check the WICEN website for details.

The VK2RWS 70cm repeater is now back on the air. Formerly at Berowra, it is now operating from Hornsby, but it is not currently linked to the Kurrajong repeater. Signal reports are welcomed and can be emailed to tech.team@nsw.wicen.org.au.

WICEN NSW, is a communications support squad of VRA Rescue NSW. The website is at nsw.wicen.org.au.

WICEN ACT is part of the Canberra Region Amateur Radio Club. Their website includes WICEN and general Club information; its at www.crarc.org.au.

WICEN Victoria has a weekly net is on each Tuesday at 8:30pm, on 3.6MHz. More details on the website at vic.wicen.org.au.

Club News

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

Last Sunday the 5th of December, members and their families and friends enjoyed the club's Christmas Party, in the marquee in the picnic area at the Long Point Vineyard and Art Gallery, near Lake Cathie. There was a good attendance and the forecast rain held off for the day.

The next meeting is a Friday Night get-together, at 7pm on the 17th of December, at the SES Building in Port Macquarie. The club's eagerly-awaited 2022 calendar will be available for purchase at the meeting. The meeting will be held in accordance with the club's COVID-19 Safety Plan.

The January Monthly General Meeting will be held on Saturday the 8th of January 2022. Meetings are usually held on the first Saturday of the month, but since the first Saturday is New Year's Day, this meeting has been moved to the second Saturday.

Candidates for the Foundation, Standard and Advanced Licences can contact the club via PO Box 712 Port Macquarie NSW 2444. Assessments for the Advanced, Standard and Foundation licences will be run early in the New Year once sufficient candidates have registered their interest.

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 on 146.7MHz, which requires a 91.5Hz sub-audible tone for access. Access to VK2RPM is available via EchoLink for those outside the repeater coverage area. 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 November 2021 web edition of the club's bimonthly newsletter "Oxtales" is now online, and past issues can be viewed on the website as well. The current issue includes a very comprehensive article on network radio by Paul VK2ICQ. 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.*

Hunter Radio Group

The Group's Christmas Luncheon is on the 19th of December 2021, at the Windale Bowling Club, starting at Noon.

Bookings are required; contact Grahame VK2FA, on 0418 686 397.

Come along and have a good time.

Note that compliance with NSW Government Health regulations will be required for all attendees.

*Rodney VK2CN
Secretary, Hunter Radio Group*

[Play ID File: 17-E-ID3.wav]

Central Coast Amateur Radio Club

Next Saturday will be the last open day at the Clubrooms for the year; they will re-open on Saturday January 8, 2022.

Planning is already underway for next year's field day, Mayham, scheduled for the 1st of May, 2022.

At the VK2RAG Somersby site, 70cm EchoLink and IRLP and the BrandMeister DMR repeater are still having problems. All other services are fully operational.

Thanks to the ongoing effort and commitment of Bob VK2AOR and Dave VK2KFU, the Morning Tea net continues daily. Why not call in; you will be sure to learn a little piece of history every day.

Adrian VK2ABS, the Club's youngest member, hosts a fortnightly SSTV net on the Club's 2 metre WICEN repeater, 147.125 MHz with 91.5 Hz tone. The net consists of 2-3 rounds predominately in Scottie-2 mode. Adrian has had a large amount of support from members and would love to see you drop in; the next net is scheduled for Friday the 17th of December at 7:30pm.

Last week's Thursday night net was run by Alan VK2MG, on the topic "*If you were in charge, what would you do to showcase Amateur Radio to the masses?*"; which promoted some great discussion. The net is on every Thursday night at 8:00pm on the club's 2m VK2RAG repeater – 146.725 with 91.5Hz tone, and on EchoLink via the CCARC and HAM conferences. SSTV and Weekly nets are also video streamed live to the club's Facebook page.

The Club's webSDR has now been relocated to the Somersby repeater site with added functionality; websdr.ccarc.org.au is currently configured to listen on 6m, 2m, 70cm and 23cm, with more functionality on the way.

You can find out more about the CCARC on the web at ccarc.org.au; via phone on 02 43402500 or on social media by searching for Central Coast Amateur Radio Club; remember to "like" to follow for updates.

Alan VK2MG

Publicity, Central Coast Amateur Radio Club.

Sydney ATV Group

The Group announces a special event coming up on Tuesday the 14th of December, at 7:30pm. The group's repeater will be in a linkup with VK2, VK3, and the VK5 ATV groups, who will displaying their latest projects, future events and much more.

The linkup will be transmitted live on 445.50MHz digital and on the BATC streamer website via the VK3RTV-1 ATV link.

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; on the site, select the VK2 callsign and if requested, the HTML5 option. 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.

Give us a call 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.*

Waverley Amateur Radio Society

The club has resumed in-person meetings, and the December meeting is on this coming Wednesday 15th in the ANZAC room of the Rose Bay RSL club. The meeting will take the form of the Christmas party and all members who intend to attend should have notified AI by now.

As the normal meeting place in the Scout Hall is still unavailable due to ongoing renovations, most other activities are still taking place on Zoom. The society hopes to be able to return to the hall some time in the new year.

Apart from the weekly nets on Monday evenings, there is a get together on the first Saturday of the month; see the website for details.

Wednesday lunchtime get-togethers, starting at Midday in the RSL bistro, are also being well attended; come along and join in if you can. They are usually available via Zoom as well.

You can keep up to date with full information about the Waverley Amateur Radio Society, on the website 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

The club's three weekly nets continue over the holiday period. These are;

Monday evenings at 8pm on the VK2RNS 2m repeater, 147.25MHz. No tone is needed, but 91.5 Hz is sent.

Wednesday's 80 metres net, also at 8:00 pm, on 3608.5kHz.
"Morning Tea with HADARC", Fridays from 9am, on 7106kHz.

Both HF nets are plus or minus QRM; Listen for VK2MA.

The next in-person even planned, is a BBQ in Hornsby, on the evening of January 11.

The Club's website has up to date details on club activities, getting setup for Jitsi Meet, plus weekly nets, a web-based contact form and the Covid Safety plan; it's at www.hadarc.org.au. The club has a group on Facebook, which can be found by searching for VK2MA, and on twitter, @VK2MA.

*Submitted by Julian VK2YJS
HADARC Publicity Officer.*

[Jitsi Meet details:
Phone: 08 7150 1136 and enter 3145759306#
Web: <https://meet.jit.si/HADARC>]

[Play ID File: 18-E-ID4.wav]

Activities on the air

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

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

Oxley Region ARC nets 7:30pm Thursday, 9am Sunday, VK2RPM 146.7Mhz with 91.5Hz tone.

Great Lakes Radio Club weekly net 7pm Monday, back on the VK2RGL Repeater, 147.1MHz with 91.5Hz tone, EchoLink VK2RGL-R.

Westlakes 80 metre nets Monday, Wednesday, and Friday at 9:30am on 3565kHz. 2m nets on 146.775MHz, see website for details.

Hunter Radio Group VK2AWX News 7:30pm Monday, on 146.9Mhz and 438.025MHz. Meeting net Wednesday 7:30pm on 146.9.

Central Coast ARC nets on VK2RAG 146.725Mhz, 91.5Hz and EchoLink; Morning tea at 10am daily – after news on Sundays – and Thursday night at 8pm. SSTV net every second Friday on 147.125MHz; next net December 17.

Amateur Radio Central West Group lunchtime net 1pm daily; evening net Monday and Friday at 8pm, VK2RCW. HF net 8pm Wednesday 3653kHz.

Illawarra ARS Nets Saturday 9:30am on VK2RMP 146.850 and VK2RUW on 146.675; Tuesday 8:30pm, 3666kHz.

Blue Mountains ARC Nets on VK2RBM, 147.050MHz with 123Hz tone; Wednesdays from 8pm; Second Sunday of the month from 5pm.

Manly-Warringah Radio Society net 8pm Wednesdays VK2RMB 146.875.

Waverley ARS net 8pm Monday on VK2RBV, 438.1125MHz. Activities online and on air, see website for details.

Fishers Ghost ARC net 7:30pm Thursdays on VK2RFG, 438.65MHz with - 7MHz offset and 91.5Hz tone required, also on Echolink.

St George ARS net 8pm Thursday, on VK2RLE 146.8MHz.

HADARC Monday night 8pm on VK2RNS, 147.25MHz, Wednesday from 8pm on 3608.5kHz, Friday 9am on 7106kHz.