

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

While no events are currently planned at VK2WI Dural, you can still make contact via email, to office@arnsw.org.au, or by phone message to 02 9651 1490.

The ARNSW Education team is keen considering a training weekend early in the new year. If you are interested, please let the Education team know by email to education@arnsw.org.au – so that plans can be confirmed in advance. Those interested will be kept informed by email, and we will have further updates here on VK2WI News.

Later in this bulletin we have a summary of on-air activities from Sydney and across the state. You can let us know what is happening in your area by email; to news@arnsw.org.au – we don't need full news items, just the details of the activity and contacts. We also welcome any updates on the progress in these activities; which we can report on VK2WI News, to tell listeners how it went.

We also wish to remind our listeners of some telephone services that are available, if you currently have any 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.

Tonight's news is being relayed on EchoLink, on the "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.

VK2WI News bulletins are also relayed through a network of regional repeaters, and we would like to thank these clubs for their continued support of our news Service. Some of these clubs also arrange to take callbacks for us, at the end of the bulletin. But, if callbacks are not taken on your relay outlet, you can let us know directly by email to callbacks@arnsw.org.au; we would like to hear from you.

Ross Hull VHF/UHF Memorial Contest

It's already underway; running for the entire month of January, the contest aims to encourage DX activity on the VHF and UHF bands.

You can enter your log for the best two days in the contest period, the best seven days, or both.

Experience what it is to work DX on 6 Metres and above.

For more information about the Ross Hull Contest, visit the contest page on the WIA website. You don't need to be a WIA member to take part; all you have to do is make contacts, have fun and enjoy our hobby.

*Rob VK2XIC
Contest Manager.*

[contest page <https://www.wia.org.au/members/contests/rosshull/>]

US Licence Exams at Wyong

With the 2021 Wyong Field Day planned for Sunday the 28rd of February, there is also a plan for US exam sessions to be running on the day, for both new and upgrading candidates.

There is a wide range of study material is available, including several free online resources.

Online supervision of exams is also available; contact the team for more information.

For more information or bookings, the Australian VE team website is vea.org.au.

Submitted by Julian VK2YJS (also AG6LE).

Weekly Solar and Geophysical Report

For the period of the 1st to the 7th of January.
First, the summary;

| Dates across the columns are | 1 st | 2 nd | 3 rd | 4 th | 5 th | 6 th | 7 th |
|------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 10cm Flux | 80 | 82 | 80 | 78 | 75 | 74 | 75 |
| Fredericksburg Index (Afr) | 3 | 1 | 1 | 3 | 9 | 9 | 6 estimated |
| Australian Index (Aaus) | 1 | 1 | 2 | 2 | 10 | 10 | 5 estimated |
| T index | 27 | 2 | 6 | 6 | 7 | 14 | 3 |

Solar activity was very low all week.

Geomagnetic activity was quiet from the 1st to the 4th, quiet to active on the 5th; and quiet to unsettled on the 6th, before returning to quiet conditions on the 7th.

F2 critical frequencies in the southern Australian region, remained near predicted monthly values, except for depression of 15% during local night on the 4th, and depression of 15% during local day on the 7th.

Now, the forecast for the 1st to the 7th of January;

Solar activity is expected to be very low.

Geomagnetic activity is expected to be at mostly quiet to unsettled levels, with some active periods possible on the 10th and 11th.

Maximum Usable Frequencies should remain mostly near predicted monthly values, though some minor MUF depressions, and some enhancements, are possible.

Data courtesy of Space Weather Services.

Solar Flux Index update

Here are the updated Solar Flux Index (SFI) figures for this week.

Having finished December, we saw a;

Minimum of 81, Average of 88, and a Maximum of 109
With peak dates from the 1st to the 8th

So far for January, we are expecting a;

Minimum of 74, Average of 79, and a Maximum of 82
With peak dates from the 1st to the 4th; and the 17th to the 31st

And looking ahead to February, we are expecting a;

Minimum of 78, Average of 80, and a Maximum of 82
With peak dates from the 12th to the 28th.

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 December 2020

Compiled with data courtesy of Space Weather Services

Solar activity was at very low levels for the month, with no M-class or X-class flares solar flares observed. There were, however, numerous C-class flares early in the month; the largest was a long duration C7.4 on the 7th. This flare was associated with a halo coronal mass ejection (or CME) that arrived at Earth around 0130UTC on the 10th, and while it raised the solar wind speed to 570 km/s, there were no sustained periods of southward IMF. There were other significant CMEs, but none were Earth-directed. Coronal holes caused mild increases in solar wind between the 21st to 25th, and 28th to 31st of December, with speed peaking at 617 km/s on the 22nd.

The strongest geomagnetic disturbance for the month was on the 21st of December with a maximum local A index of 11, signifying unsettled conditions. This was due to a recurrent north pole coronal hole lobe, extending to mid latitudes. A further lobe increased activity again on the 24th. These coronal hole extensions have persisted for several months. A shock was observed in the solar wind at approximately 0130UTC on the 10th, signalling the arrival of the halo CME launched from the Sun, on the 7th of December; however, this did not produce any significant activity.

There were no significant ionospheric depressions for the month; the largest depression was up to 255 on the 22nd of December, following mild coronal-hole induced geomagnetic activity on the 21st. The regional daily T index was -21 on this day. Australian region MUFs were mostly near predicted monthly values to enhanced. Sporadic E was present much of the month, being strong at times and obscuring the F region.

In the solar and geophysical report each week, we talk about the maximum usable frequencies both observed in the report period, and in the forecast for the next week. This is based on observations of foF2, which is the maximum frequency reflected vertically by the ionosphere. While a vertical propagation path in itself is not particularly useful, the data is a reference point, from which estimates of frequencies for any oblique circuit can be made.

The foF2 is the most important parameter describing the state of the ionosphere at a particular location. Along with the T-index, foF2 is a key indicator of ionospheric conditions.

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-FCAL132.wav]

Duration 1m54s

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

GEORGIA; Peter, G4ENL plans to be active as 4L1PJ from Svaneti while on work assignment. He expects to be there for the next few years. Activity will be on various HF bands using SSB.

NIGER; Adrien, F5IHM is active as 5U4IHM until February 11. Activity is on 40 and 20 metres using CW.

MALDIVES; Massimo, IZ5KID is active as 8Q7MM. Activity is on various HF bands using mainly digital modes and with low power.

PAKISTAN; Syed, AP2AM is active on 160 and 80 using FT8 at his sunrise.

ANGOLA; Paulo, CT1FJZ is active as D2FJZ from the Province of Cuando-Cubango until September 2021 while on work assignment. Activity is on 80 to 10 metres using SSB.

FEDERAL REPUBLIC OF GERMANY; Uwe, DO2PZ is active as B100AVUS during all of 2021 to celebrate the 100th anniversary of the AVUS. Located in the southwest of Berlin and opened in 1921, it is the oldest controlled access motorway in Europe.

JAPAN; Special event call 8N1IZA is active until March 31 to celebrate the 50th anniversary of Niiza City.

JAN MAYEN; Erik, JX2US has been active on 80 using CW, from 1000 to 1200UTC.

CZECH REPUBLIC; Members of the radio club in Roznov pod Radhostem are active with special call sign OL70KRT to celebrate the club's 70th anniversary.

ASIATIC RUSSIA; Special event station RJ30KR is active from region R9Y in CQ Zone 18 during January, to mark the 30th anniversary of the Amateur Radio Club Kristall.

AUSTRALIA; Grant, VK5GR will be active as VK5KI from Kangaroo Island, IOTA OC-139, from January 11 to 22. Activity will be holiday style on 80 to 6 metres using CW, SSB and FT8, and possibly with RTTY and PSK.

ANTARCTICA; Seba, SQ1SGB and Will, M0ZXA are active as either VP8/SQ1SGB or VP8HAL from Halley VI[6] Research Station until the 4th of February. They are active in their spare time on 40 and 20 metres using JT65 and FT8.

INDIA; Special event station AT2YAR is active until March 1 to celebrate 100 years of amateur radio in India.

INDONESIA; Ravie, YD7RV is active from Laut Island, IOTA OC-166, and is active almost daily around 1700UTC on 40 metres using FT8.

CAYMAN ISLANDS; Pete, K8PGJ will be active as ZF2PG from Grand Cayman, IOTA NA-016, until January 17. Activity will be on 160 to 10 metres. This includes an entry in the upcoming North American SSB QSO Party.

THIS WEEKEND ON THE RADIO. The North American CW QSO Party, NCCC RTTY Sprint, QRP 80-Metre CW Fox Hunt, NCCC Sprint CW Ladder, YB SSB DX Contest, Old New Year Contest, SKCC Weekend CW Sprintathon, UBA PSK63 Prefix Contest, NRAU-Baltic Contest, DARC 10-Metre Contest and RSGB AFS Data Contest are all on over this weekend.

The RSGB Hope QSO FT4 Party, OK1WC CW Memorial, K1USN Slow Speed CW Test and 4 States QRP Group Second Sunday Sprint are scheduled for January 11.

The RTTYOPS Weeksprint, Worldwide Sideband Activity Contest and RSGB Hope QSO CW Party are scheduled for January 12.

The RSGB Hope QSO RTTY Party, VHF-UHF FT8 Activity Contest, CWops Mini-CWT CW Test, Phone Fray and QRP 40-Metre CW Fox Hunt are scheduled for January 13.

WICEN News

WICEN NSW, is a communications support squad of the NSW Volunteer Rescue Association.

The informal "FEBEX2" communications exercise concluded this afternoon, and WICEN thanks the amateur radio operators and clubs across New South Wales and ACT that took part. WICEN established a base at Little Bay in Sydney, with members across the state setting up home or field stations as part of a wider exercise. On HF, 80 and 40 metres, both SSB and JS8 were used. FM was used on 2m and 70cm, along with 70cm DMR, and other WICEN radio frequencies.

The WICEN 2m repeater at Chatswood is on 147.15MHz with a +600kHz offset. This is the same frequency as the Mt Heaton (Newcastle area) repeaters. However, Chatswood has a 91.5 Hz tone, and Mt Heaton 123 Hz. Will this work? Help WICEN find out!

WICEN and the St. George Amateur Radio Society are jointly testing a 70cm FM repeater at Mt. Bindo; VK2RAH is on 439.875 MHz, with the standard negative 5.0 MHz offset, and no tone required or sent. Coverage reports so far appear good; so, please "give it a go" and let callback@sgars.org know your results.

WICEN weekly nets are on Sunday evenings; the main net is at 6pm with a secondary digital voice check-in net at 6:30pm.

Members have been experimenting with WINLINK and JS8CALL to pass short text messages on Monday evenings, supported by a Google Meeting.

The WICEN website, at nsw.wicen.org.au; includes details on exercises, the Covid safety plan, and a web contact form. Facebook users will find an official WICEN NSW page; and an informal, national WICEN group.

WICEN members are reminded to regularly check their vrarescue.org email address. Members are also encouraged to take advantage of the free courses offered by the Office of Emergency Management.

WICEN is planning to be at the CCARC Field Day at Wyong on February 28, 2021.

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. Duncan's Run at Turra-Bulga State Forest is currently scheduled for the 20th and 21st of March; more details on their website at; vic.wicen.org.au.

[OEM link: <https://www.emtraining.nsw.gov.au/> Messaging software at: <http://js8call.com/> and <http://winlink.org/>]

Club News

We start this week, with news from the Kelso Repeater Group

The group is pleased to announce that the VK2RKG repeater is now operational.

The output frequency 146.9MHz with a -600kHz offset.

While its low power, the repeater is provides adequate coverage in the Bathurst area, providing coverage between Mt Bindo on 146.650 and Gowan VK2RCW on 147.200. Visitors to Bathurst are encouraged to give the locals a call.

Advised by Paul VK2AHB.

Oxley Region Amateur Radio Club

The Club is planning to resume in-person meetings, with the February general meeting at 2pm on Saturday the 6th of February. The venue is the SES Building in Port Macquarie. The Club's Committee will continue to closely monitor the evolving public health situation, to ensure that activities comply with restrictions, which may change at short notice.

The club's 2021 50th Anniversary calendar has proven to be very popular, and by now most members should have received their calendars by safe hand delivery. Calendars will also be available at the next meeting on Saturday the 6th of February.

The Oxley Region Amateur Radio Club's 2021 annual Field Day is on Saturday and Sunday the 12th and 13th of June, during the Queen's Birthday long weekend, at the Wauchope Showground Hall. All the usual Field Day attractions will be there, and the Field Day Dinner will be in the Function Room at Port Macquarie Golf club on the evening of Saturday the 12th. Start planning and book your accommodation early, as the area will be even more popular than usual this year. There are limited caravan and camping sites at Wauchope Showground, so if you want to stay on-site, it is wise to book now.

In the absence of in-person meetings, members and visitors are encouraged to participate in the club on air nets as often as possible. There are two 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. VK2RPM is also available via EchoLink, for those outside the coverage area of the repeater.

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 2020 web edition of the club's bimonthly newsletter "Oxtales", is now online, and the January 2021 issue will be published soon. Past issues are available on the website as well. The club is also on Facebook; just search for Oxley Region Amateur Radio Club.

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

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Hunter Radio Group

The VK2AWX Monday night news broadcasts take a break over the new year period, and resume on the 8th of February.

However, the Wednesday evening nets continue. They are on the Group's VHF Repeater, on 146.9MHz, and start at 7:30pm.

*Rodney VK2CN
Secretary, Hunter Radio Group.*

Central Coast Amateur Radio Club

The Clubs repeater team have recently commissioned a new DMR repeater in conjunction with the ARNSW Radio Network Group and reports so far are that the coverage is great! Apart from a few packets lost here and there, performance seems solid. The repeater is on 438.850MHz with a negative 7MHz offset, and VK-DMR talk groups.

The 2021 Wyong Field Day is still scheduled to go ahead on Sunday the 28th of February, with several traders already booked in.

Speakers that have already been booked, include; Dr Brian Clarke, who will be sharing his knowledge and experience of Operational Amplifiers - devices he has worked with, for over 60 years. The presentation will cover theoretical and practical characteristics, as well diverse applications including examples of amplifiers, filters and rectifiers. It will be a talk of interest for Hams at all levels.

Also speaking will be Ray Robinson, from Tube Radio; and Roger Harrison will convene a meeting of the Weak Signal Group.

If you are interested in attending to sell goods, provide a lecture or take part in the car boot sale, please email fieldday@ccarc.org.au for more information. The event is subject to public health advice, which the team are monitoring closely. Updates will be provided as progress continues, both on the Club's website, and here on VK2WI News.

In last week's news we mentioned that the CCARC clubrooms were scheduled to re-open this weekend - however, with the rapidly developing health situation in the Greater Sydney area, the Club's executive team decided to postpone opening, with the clubrooms remaining closed for now.

The Club's Thursday evening net has returned for 2021, with Brad VK2NMZ kicking off the year with a general catch-up; where all stations shared updates and their latest news.

The morning tea nets are being hosted for the holiday season, by the amazing Dave VK2KFU. With Dave's vast experience facilitating nets, along with his own spin on "This Day in History" it is a very enjoyable net to be involved with.

Both nets are on the VK2RAG 2 Metre repeater, 146.725MHz with a 91.5Hz sub audible tone.

You can find out more about the CCARC on the web at ccarc.org.au; or on social media by searching for Central Coast Amateur Radio Club. Remember to give the club a “like” to follow for updates.

Brad VK2NMZ

Vice-President and Publicity, Central Coast Amateur Radio Club.

Illawarra Amateur Radio Society

The Society meets on the second Tuesday of each month except for January; the first meeting for 2021 will be on Tuesday evening, the 9th of February. The general meeting starts at 7:30pm; directly after the Committee Meeting at 6:30pm. Attendees are welcome to arrive early and enjoy a pre-meeting chat and cuppa in the foyer.

Meetings are at the BlueScope Steel Visitor's Centre, on the southern side of the Wollongong CBD. After turning off Springhill Road into the main entrance road, immediately turn right just before the security gates and follow the signs to the Visitors Centre. Due to the large size of the Visitor Centre, physical distancing requirements can easily be maintained.

At the February meeting, the Society's resident teacher Vaughan VK2KBI will be discussing the basics of electronics and electrical theory. Everyone can do with a "brush-up" on what makes it all work!

The night will conclude with coffee, tea and cake in the venue's large foyer, where you can also relax on the very comfortable lounges, while of course maintaining the necessary physical distancing.

A reminder of the Society's weekly Nets; the Saturday morning net starts at 9:30am, run by Steve VK2BGL. You can join on the 2 metre repeaters, VK2RMP on 6850 or VK2RUW on 6675, or call-in on EchoLink, via VK2BGL-R. The second weekly Net is on 80 metres on Tuesday evenings, except for meeting nights; the usual frequency is 3666kHz, plus or minus for other usage, and it starts at 8:30pm.

You can find out more about the Illawarra Amateur Radio Society on the web at iars.org.au, and the society is also on Facebook. The website again; iars.org.au.

To conclude, all listeners are invited to attend the first meeting of the Illawarra Amateur Radio Society for 2021 – its at 7.30pm on Tuesday the 9th of February; at the BlueScope Steel Visitors Centre, Springhill Road, Wollongong.

*Submitted by Rob VK2MT
Publicity Officer for the Illawarra Amateur Radio Society.*

Blue Mountains Amateur Radio Club

The Blue Mountains Amateur Radio Club is an active group of individuals interested in all things Amateur Radio; including supporting emergency services, electronic equipment testing, satellite communications and Jamboree On The Air. The club has a range of members of different ages and professional backgrounds.

The first foundation license weekend for the year will be held at the BMARC clubrooms on Saturday 6th and Sunday 7th February.

Training and exams will be held for new radio amateurs along with exams will be available for anyone who wishes to upgrade to Standard or Advanced licences.

For more information, or to book; contact the Club Secretary, Irene VK2VAN – her email address is secretary@bmarc.org.

The Club has two on air nets each week; the 80 metre net Starts at 8pm on Tuesday evenings, on 3543 kHz. On Wednesday night from 8pm, there is a net on the club's 2 metre repeater on 147.050MHz with a 123Hz tone for access, and on the 6 metre repeater on 53.875MHz.

More information about the club can be found on the website, at www.bmarc.org.

*73 James VK2GOH
Publicity Officer, Blue Mountains Amateur Radio Club.*

Amateur Radio Repeater Group

The Group will be running another 2m Fox Hunt on Sunday the 17nd of January, along the M5 Corridor, south from Crossroads towards Campbelltown. The fox will be hidden in a public space, park or bushland.

Co-ordination will start from around 8:30am on the Fisher's Ghost 70cm Repeater VK2RFG; which is on 438.650MHz with a negative 7MHz offset and 91.5Hz tone required.

If you are interested in attending the hunt, you can email info@arrg.club to register your interest.

This would be a great event to get your kids involved and have a great day out.

For more information and further updates, visit the group's website at www.arrg.club.

St George Amateur Radio Society

The Society's repeater team has been very busy at the Mt Bindo VK2RDX site, restoring the main 2m FM repeater antenna system.

The repeater transmits on 146.65MHz with minus 600kHz offset.

Initial reports indicate the work was very successful; however, additional signal reports are most welcome. These can be made during callbacks after the VK2WI News, or by email to callback@sgars.org.

Paul VK2GX

On behalf of the SGARS repeater team.

Hornsby and Districts Amateur Radio Club

The Club BBQ has been postponed until later in the month; updates will be provided on the club nets.

The first general meeting for 2021 is scheduled for the 23rd of February at Mt Colah, with the February the 8th meeting likely to be an informal dinner instead.

The Club's website has up to date details on club activities and arrangements for meetings, plus 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.

The Club's three regular nets continue each week. Monday's net starts at 8pm on the VK2RNS 2 metre repeater, 147.250MHz No tone is required, but a 91.5 Hz tone is sent.

The 80-metre net is on Wednesday evenings on 3608.5 kHz, also from 8pm, and Morning Tea with HADARC is on or near 7106 kHz from 9am on Fridays.

The Club's 2 metre repeater, VK2RNS on 147.250 MHz, can now be accessed on Allstarlink Node 41646. On EchoLink use VK2RNS-R, node 611266.

Nets are supplemented with Jitsi, which is an open source audio and video conferencing system. Out-of-town members and visitors are most welcome to participate in any nets via Jitsi or linked repeaters.

*Submitted by Julian VK2YJS
HADARC Publicity Officer.*

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

Activities on the air

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

Great Lakes Radio Club weekly net 7pm Monday on VK2RGL, 147.1MHz.

Westlakes nets Monday, Wednesday and Friday; 9:30am on 3565kHz.

Hunter Radio Group meeting net Wednesday 7:30pm on 146.9MHz.

Central Coast ARC net Thursday night on VK2RAG 146.725Mhz, 91.5Hz; also Echolink *CCARCNSW*.

Amateur Radio Central West Group afternoon tea net 4pm daily; Monday and Friday night net at 8pm, on VK2RCW. HF net 8pm Wednesday 3653kHz.

Illawarra ARS Nets - Tuesday at 8:30pm on 80m, 3666kHz. Saturday 9:30am on VK2RMP 146.850 and VK2RUW on 146.675.

Blue Mountains ARC nets 8pm Tuesday on 3543kHz, 8pm Wednesday on VK2RBM, 147.050MHz with 123Hz tone and 53.875MHz.

WICEN nets on Sunday evenings from 6pm.

Waverley ARS net 8pm Monday on VK2RBV, 438.1125MHz. Activities online and in person, 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, on air net Tuesday at 8pm on VK2RNS – net control VK2WAH [we are home].

Manly-Warringah on air meeting net, Wednesdays 8pm on 146.875MHz.