

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.

We've been advised by the St George Amateur Radio Society, that the VK2RDX 2m repeater at Mount Bindo, is currently off air. At this time, we don't know what the issue is, but the repeater team has been advised and they will investigate as soon as possible.

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. With more, here's Mathew VK2YAP;

[Play File: 15-B-CTR-P1.wav]

Duration: 0m46s

In: Amateur Radio is...

Out:....soon to VK2WI News.

Transcript;

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

Perhaps you're interested in starting something new, like contesting or getting started with a digital hotspot, but you don't really know where to begin. Where do you look? Who can you ask?

Connector!

Connector's 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, stay tuned to hear more about Connector, coming soon to VK2WI News.

Weekly Solar and Geophysical Report

For the period of the 18th to the 24th of November;

This report issued on the 25th of November.

First, the summary;

Dates across the columns are	18 th	19 th	20 th	21 st	22 nd	23 rd	24 th
10cm Flux	116	115	119	117	116	113	110
Fredericksburg A-Index (AFr)	5	4	3	8	2	1	6
Australian Index (Aaus)	6	4	6	7	3	2	8 estimated
T index	89	71	81	47	53	80	84

Solar activity was at R1 on the 11th, with an M1.6 flare at 1256UTC; and was at low levels on other days. Geomagnetic activity remained at quiet to unsettled levels.

F2 critical frequencies in Southern Australia were mostly near predicted, with the 21st and 22nd experiencing depressions of up to 15% during local day.

The forecast for the 25th of November to the 1st of December;

Solar activity is expected to remain at low levels. Geomagnetic conditions may reach G1 levels on the 25th, 26th and 30th; with quiet conditions expected on other days.

MUFs maybe briefly depressed after local dawn, also on the 25th, 26th and 30th; and otherwise, near predicted monthly values.

Data courtesy of the Australian Space Weather Forecasting Centre.

Solar Flux Index update

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

For October, we had a;

Minimum of 105, Average of 134, and a Maximum of 163
With peak dates from the 1st to the 13th.

So far for November, we are expecting a;

Minimum of 105, Average of 124, and a Maximum of 142
With peak dates from the 1st to the 17th

And looking ahead to December, we are expecting a;

Minimum of 110, Average of 123, and a Maximum of 135
With peak dates from the 6th to the 31st.

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>]

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-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.

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.

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ARRL DX news

We start with the stations on air specially for this weekend's CQ Worldwide DX CW contest, which continues until 2359UTC on Sunday.

ASIATIC RUSSIA; Operator RN1B will be active as RN1B/0 from Sakhalin Island, IOTA AS-018.

HUNGARY; Sanyi HA7VK, is active as HG22TISZA as a Single Op/All Band/High Power entry.

LITHUANIA; Operators UT3GF, YL1ZF, LY4A, LY2BKT, LY2CO, LY3AB, LY2NZ and LY5T are active as LY4A as a Multi Op entry.

.... And in other DX activity on the bands;

EAST MALAYSIA; Saty, JE1JKL is active as 9M6NA from Labuan Island, IOTA OC-133, until November 29, and includes activity in the contest.

PHILIPPINES; Irek, SP3SUX is active as DV8/KH7EA until December 3; and in the contest as DX8H.

RODRIGUES ISLAND; Kazu, M0CFW is active on the HF bands, as 3B9/M0CFW until November 30. In the contest he is active as 3B9KW.

HONDURAS; Operators W1UE, K1XM, KQ1F, K1TR and SM7IUN are active as HQ9X from Roatan Island, IOTA NA-057, until November 30. Activity is on the HF bands, and in the contest as Multi Op/2 transmitter entry.

MADAGASCAR; Operators PA3EWP, DL2AWG, DK2AMM, PG5M, and PA5X are active as 5R8WP, 5R8WG, 5R8MM, 5R8CG, and 5R8PA, respectively, from Nosy Be Island, IOTA AF-057, until December 3. Activity is on 160 to 6 metres using CW, SSB, RTTY, and FT8 with two stations active.

SVALBARD; Peter, LA7QIA is active as JW7QIA from Longyearbyen, IOTA EU-026, until November 29, including during the contest.

AMERICAN SAMOA; Bob, W7Yaq and Al, K7AR are active as K8H from Pago Pago, IOTA OC-045, until December 1. Activity is on 160 to 6 metres using CW and SSB.

ARUBA; John, W2GD is active as P44W until November 29. Activity is on the HF bands as time permits.

POLAND; Special event call signs 3Z95PRK, HF95PRK, SN95PRK, SO95PRK, SP95PRK, and SQ95PRK will be active until December 11 to celebrate the 95th anniversary of Poland's largest regional radio broadcasting station, Polskie Radio Katowice[kah-to-VEET-suh].

PALAU; Nobu, JA0JHQ is active as T88PB from Koror, IOTA OC-009, until November 29. In addition, Tony, JH1FFW will be active as T88RC from November 30 to December 5. Activity will be on 40 to 10 metres using SSB and FT8.

BENIN; Tapani, OH5BM, Pekka, OH2TA, and Timo, OH5LLR are active as TY5AF from the village Grand Popo until November 29. Activity is on the HF bands using all modes, including in the CW contest.

INDIA; Operators VU2DSI, VU2EVU, and VU2XPN will be active as AU2JCB, AU3JCB, and AU5JCB, until December 13 to commemorate the birthday of Jagadish Chandra Bose. Activity will be on 80 to 6 metres using SSB and FM.

KOSOVO; Henning, OZ2I is active as Z68EE until November 30, and will take part in the contest.

THIS WEEKEND ON THE RADIO. The CQ Worldwide DX CW Contest, CWops Test, RTTYOPS Weeksprint, RSGB 80-Metre CW Autumn Series, NCCC CW Sprint and RTTY Sprint, QRP 160-Metre CW Fox Hunt, K1USN Slow Speed CW Test and the Ham Spirit SSB Contest will certainly keep contesters busy this weekend.

QCX CW Challenge, ICWC Medium Speed CW Test, OK1WC CW Memorial, RSGB FT4 Contest, Worldwide Sideband Activity Contest and RTTYOPS Weeksprint are all on, November 28 and 29.

Club News

We start this week, with news from the Oxley Region Amateur Radio Club; This morning, Club members provided safety communications for the postponed Beechwood Billycart Classic; this 5km downhill run, has the distinction of being the longest downhill billycart race in Australia.

The clubs Christmas party is on Saturday the 3rd of December at the Long Point Vineyard and Art Gallery covered picnic area, at Lake Cathie. This is always an enjoyable social event for members, their families, and friends; with a sausage sizzle lunch, followed by delicious dessert. With no formal Club meeting in December, the next general meeting is at 2pm on Saturday the 7th of January 2023, in the SES Building in Port Macquarie.

The VK2RCN Telegraph Point repeaters will soon return to air, operating from the new site; commissioning has been delayed slightly by the late arrival of some building materials. Hopefully, weather permitting, all repeaters will be up and running in time for Christmas.

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 November 2022 edition of the club's bimonthly newsletter "Oxtales" is now online, and past issues are on the website as well. The November issue reports on the recent ADS-B aircraft tracking and P25 GRN presentations 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.*

Central Coast Amateur Radio Club

The Clubrooms at Kariong are open every Saturday, from 10:30am. Yesterday was the regular “Show and Tell” day; this featured a display of several pristine “CD” radios from the 1970s, along with various test equipment; including some to test these old radios, and an old transistor tester, which was accompanied by a short lecture on transistor theory.

Congratulations to Andy VK2AAK, winner of the first of the club’s “Christmas Ham” events – a Siglent Spectrum Analyser. The second is on now, running through until December 9. To find out more, visit the Club’s website or social media.

A reminder to members that the end of year lunch is approaching on the 10th of December; RSVP to assist with catering requirements.

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 is on each weekday from 10am; The weekly Club’s net is on Thursday night from 8pm. They’re both 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.

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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.*

Illawarra Amateur Radio Society

November's meeting was the Society's Annual Auction; resident auctioneer Simon VK2XQX ran a fast-paced night, with some great bargains to be had. The previous Saturday was the society's second "Shack Crawl" event, with a dozen members visiting the shacks of VK2KU, VK2AAL, VK2FDSD and lastly VK2KQB. As well as inspecting various radio set-ups and antenna systems, they were also well fed and watered along the way. It was a great day with the next Shack Crawl planned for early next year.

The next meeting of the Society is on Tuesday the 13th of December. The general meeting starts at 7:30pm, directly following the Society's Committee Meeting at 6:30pm. Attendees are most welcome to arrive from 6.30 onwards to enjoy a pre-meeting chat and cuppa in the foyer. Meetings are at the BlueScope Steel Visitors Centre, on the southern side of the Wollongong CBD; after turning off Springhill Road into the main BlueScope entrance road, turn immediately right before the security gates, following the large signs towards the Visitors Centre.

December is the Society's Christmas meeting; it's a "Show & Tell" night with pizza and drinks supplied free of charge to celebrate a great year and the upcoming festive season. So, bring along your current project, or even an old one that you're proud of, along with an empty stomach to help with the dispatching of the pizzas.

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

You can find out more about the Illawarra Amateur Radio Society, including details on Amateur Radio training and examination activities, 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 Christmas meeting of the Illawarra Amateur Radio Society, 7.30pm on Tuesday the 13th of December, at the BlueScope Steel Visitor Centre in Wollongong.

*Advised by Rob VK2MT
President of the Illawarra Amateur Radio Society.*

Fisher's Ghost Amateur Radio Club

The next meeting is on this Wednesday the 30th of November, in Block M at the Campbelltown School of Performing Arts, Beverley Rd. Campbelltown, commencing at 7:30pm. Visitors wishing to learn more about Amateur Radio are most welcome to attend the Club's final meeting for the year.

The Club's weekly net on Thursday evenings starts at 7:30pm on the Club's repeater, VK2RFG, on 438.65MHz. Anyone is welcome to check-in. The repeater has a negative 7MHz input and a 91.5Hz CTCSS tone is required for access – its also available via EchoLink.

Throughout December, the Club will be celebrating its 40th anniversary with members activating the special event callsign VI2FG40. Activity will be mainly on 40m SSB and more information can be found on the QRZ page, for VI2FG40.

To find out more about the Club's activities, visit the website at fgarc.org.au, and the Club's Facebook page can be found by searching for VK2FG.

*Advised by Peter VK2PR
For the Fishers Ghost Amateur Radio Club.*

St George Amateur Radio Society

The Society's next meeting will be their AGM, will be on Wednesday the 7th of December. This will be an opportunity for members to have their say in running their Society, and even take part in it themselves.

At the AGM, the winners of all the Society's various contests will be announced, followed by opportunity for members to peruse the disposals items on offer.

Prior to the meeting, a BBQ will be held in the park, adjacent to the scout hall. The BBQ will start at about 6pm, followed by the Annual General Meeting at 7:30pm.

It's at the usual venue – First Kyle Bay Scout Hall at Donnelly Park, Kyle Parade Connells Point – near South Hurstville.

For more information, visit the society's website, www.sgars.org.

*73 de Peter VK2EMU
Publicity Officer, St George Amateur Radio Society.*

Hornsby and Districts Amateur Radio Club

The most recent HADARC meeting opened with Chris VK2YMW, reflecting on the Carrington Event in 1859 – when a massive CME blew industrial-size power transformers and caused such an over-load that many systems failed. While Chris suggested this may be a good way to stop online scammers, the next big CME event may not be along for quite a while – a more immediate measure might be just to keep your software up to date.

Then HADARC members were treated to some of the most exciting and interesting use of Radio seen in a long time. Alexander Ryan has developed and tested an RF plasma thruster, using some of the most cutting-edge processes known. Alex discussed the differences between chemical and electrical propulsion; using accelerated charged particles in an electrical field, Alex was able to show an efficiency gain of 10 times, compared to previous technologies. He developed a plasma soup and used electrons and ions in the soup to be directed using an electrical field, then used tungsten to generate thermionic emissions and control the plasma. It sounded a lot like radio valves taken to the next level.

Finally, Alex discussed how he designed a helical antenna within a chamber and using an RF field at 13.56Mhz, to generate a 600 Watt thruster. This work showed that RF and plasma together, could provide practical and highly efficient propulsion for small satellites and space payloads; an extraordinary use of radio at the very frontiers of space.

We also found out that Alex's grandfather was a past president of the WIA.

Special thanks to Rod VK2DAY, for working with Alex to attend HADARC. Rod's work on the QUA Magazine is first class and his contribution is greatly appreciated.

A reminder of the Club's Christmas function on the 10th of December, at Magpies in Waitara. Please contact Chris VK2YMW to register for a fun afternoon of your best radio stories over a relaxed lunch and a few 807's. There are rumours that a few special things will happen at this event, so please stay posted.

You can also keep Radio-active on HADARC's weekly nets.

73 Matt VK2BAI

HADARC President.

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Activities on the air

Daily;

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

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.

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