# 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 would welcome any updates from club and groups; simply email <u>news@arnsw.org.au</u> – we don't need full items, just the details of the activity and contacts. Don't forget, we always welcome reports on the outcome of recent activities, as well.

General enquires can be directed to the ARNSW office via email, to <u>office@arnsw.org.au</u>, or by leaving a phone message on 02 9444 0123.

Tonight, we 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.

### **ARNSW Radio Experimenters Group**

The next meeting of the Group is coming up in two weeks' time, at noon on Sunday the 26<sup>th</sup> of May.

The meeting starts with the usual "show and tell" where anyone can stand up and share what they have been working on. This may be a radio that they have been experimenting with, or built or repaired, or just something that they find interesting.

After the show and tell, Peter VK2KFP will be sharing his experience building modern 2m, 6m and 70cm power amplifiers. Topics include system design, test equipment, tune-up and sourcing of hard-to-find components. We will also cover pitfalls and traps, and what happens when things go wrong!

For those who are looking for something new in Amateur Radio, the Radio Experimenters Group can be what you are looking for.

So come along to the members meet up and Trash and Treasure on Sunday the 26<sup>th</sup> of May, and stay around for the Experimenters Group meeting from noon.

Peter VK2EMU Coordinator, ARNSW Radio Experimenters Group.

### From the ARNSW Secretary...

The ARNSW AGM was held 2 weeks ago. At the close of board nominations, there were six candidates for the five vacant positions. The election, overseen by our returning officer Peter VK2EMU, resulted in the following being elected:

AI VK2OK, Brad VK2NMZ, Stewart VK2BMX, Eric VK2VE and Bob VK2CAN.

We extend our thanks to John VK2LJ for his valuable contributions to many major projects at VK2WI Dural and throughout the operation of Amateur Radio NSW, and we look forward to his continued involvement with project co-ordination into the future.

At the board meeting, held in the afternoon following the AGM, the following positions were elected by the board:

President – Mathew VK2YAP Vice Presidents – AI VK2OK and Matt VK2FLY Secretary – Eric VK2VE Treasurer – Mark VK2XOF

Every time we send anything out to members from the office, either by post or by email, a number of items get returned or emails bounce. This, of course, results in members not receiving items which they should be receiving. If you change any of your details, please notify the office either by post, or email to <u>membership@arnsw.org.au</u> so that we have your current details. With the change to class licensing, we can no longer check your details on an ACMA database; so, it is imperative that you notify us in a timely manner.

Also, we need a current email address if you wish to receive notices of member events, and our newsletter, *All Access.* So, if you haven't got an email address on record, or think it may be incorrect, please let us know so we can update and keep you informed with email correspondence.

73....Eric VK2VE.

# Weekly Solar and Geophysical Report

For the period of the 3<sup>rd</sup> to the 9<sup>th</sup> of May. First, the summary of activity;

Dates across	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>
the columns are							
10cm Flux	156	167	177	171	204	227	233
Fredericksburg	16	5	12	13	6	10	7
A-Index							
Australian	5	3	6	10	4	4	2
A-Index							estimated
T index	101	87	106	117	109	116	111

Solar activity reached R3 levels on the  $3^{rd}$  with 4 M-class and one X1.6 flare; R2 on the  $4^{th}$  with nine M-class flares; R3 on the  $5^{th}$  with 10 M-class and 2 Xclass flares; R3 on the  $6^{th}$  with 5 M-class and an X4.5; R2 on the  $7^{th}$  with 8 flares; R3 on the  $8^{th}$  with one M-class and two X-class flares; and R3 on the  $9^{th}$  with 5 M-class and two X-class flares.

Geomagnetic activity was low to moderate, remaining below warning threshold. F2 critical frequencies in Southern Australia remained mostly near predicted monthly values. Depressions of 30% during local day and 25% during the night were observed on the 3<sup>rd</sup>, and depressions of 15% during the day and 30% during the night on the 4<sup>th</sup>.

The forecast, issued on the 10<sup>th</sup> of May, through until the 16<sup>th</sup>;

Solar activity is expected to be at R3, decreasing to R1 to R2 levels later in the week. Geomagnetic activity is expected to reach G4 or possibly G5 on the 10<sup>th</sup>, decreasing to G3 to G4 on the 11<sup>th</sup>. Conditions are expected to return towards G1 from the 13<sup>th</sup> of May, and remain low to moderate for the remainder of the week.

Maximum usable frequencies are likely to depressed up to 40% from the 10<sup>th</sup> the 12<sup>th</sup>, due to expected geomagnetic disturbance. MUF are expected to recover to near predicted monthly values, later in the week.

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.

Having finished April, we had a;

Minimum of 112, Average of 163, and a Maximum of 227 With peak dates from the  $15^{th}$  to the  $26^{th}$ 

So far for May, we are expecting a;

Minimum of 130, Average of 186, and a Maximum of 227 With peak dates from the  $8^{th}$  to the  $20^{th}$ 

And looking ahead to June, we are expecting a;

Minimum of 165, Average of 182, and a Maximum of 205 With peak dates from the 4<sup>th</sup> to the 6<sup>th</sup>, and the 12<sup>th</sup> to the 17<sup>th</sup>.

Update with thanks to Noel, VK2FUL.

[using daily data updates from : <u>http://www.swpc.noaa.gov/products/usaf-45-day-ap-and-f107cm-flux-forecast]</u>

## [Play File: 15-E-ID2.wav]

# 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-FOAR191.wav]

Duration: 3m26s In: Imagine a world ... Out: ...I'm Onno VK6FLAB

For more information about this series, including audio, transcripts and other useful amateur radio resources, Onno's website is; <u>vk6flab.com</u>; and you can contact Onno by email, to <u>cq@vk6flab.com</u>.

# [WICEN News]

And now with this week's WICEN News, here's Richard VK2SKY;

#### [Play File: 17-E-WNS0512.wav]

Duration: 2m03s In: It's been quiet ... Out: ... at wicen.org.au

#### [Transcript]

It's been quiet for the last few weeks, but as most listeners will know, WICEN is supporting Dementia Australia's "Memory Walk and Jog" events throughout 2024. Next Sunday, WICEN will be at Leichhardt Oval, Lilyfield, in Sydney's inner west.

The Memory Walks are great "starter" events for new (or rusty) WICEN members, as they take only a couple of hours. WICEN also provides the radios for these events, so you don't even need to bring your own gear. Why not give one a go? You'll find a link to the events list in the text edition of this news.

To participate in any WICEN event, or just find out more about how you can use your Amateur Radio skills to benefit the community, you can email wicen.ops@vrarescue.org.

WICEN nets take place every Sunday evening, using FM voice, DMR, P25, or HF voice, depending on the week. All WICEN members and other Amateurs are welcome to call in.

Next Sunday, the 5.30pm net will be on HF, on or near 7110kHz LSB. Net controller VK2WIZ will announce the call-in sequence and other information. Please note the earlier start time. The 6pm net will be on the Kurrajong 70cm FM repeater, 439.825MHz and a 91.5Hz tone, with net controller VK2WIB.

WICEN NSW is a support squad of VRA Rescue NSW, specialising in tactical radio communications. In between activations, WICEN supports local community events: these provide practical training for members, and help raise the public profile of Amateur Radio.

To find out more, check out the WICEN NSW web site, at nsw.wicen.org.au

WICEN is also on Facebook, and on X; there, you can find photos and information about recent and upcoming WICEN activities. Links are in the text edition of this news.

For information about other WICEN groups around Australia, visit the web at wicen.org.au.

[ Memory Walk and Jog Events: <u>https://www.memorywalk.com.au/find-an-event</u> ] [ WICEN NSW web site: <u>https://nsw.wicen.org.au/</u> ] [ "National" WICEN on Facebook: <u>https://www.facebook.com/groups/124735400158</u> ] [WICEN NSW facebook at <u>https://www.facebook.com/WICENNSW</u> ] [WICEN NSW X at <u>https://twitter.com/wicennsw</u> ]

#### **Club News**

We start this week with news from the Oxley Region Amateur Radio Club; The well attended May Monthly General Meeting last Saturday the 4<sup>th</sup> of May, was treated to a very interesting presentation by Peter VK2HPF on the soon to be completed new Astronomical Observatory in Port Macquarie. It replaces the observatory built in 1961 on the same site.

The May Friday Night Get together is at 7 pm this Friday the 17<sup>th</sup> in the SES Building in Port Macquarie. Monthly Friday Night get togethers are now on the third Friday night of each month, as marked on the ORARC 2024 club Calendar.

The Club's Annual Antenna Shootout will be at 10am next Sunday the 19<sup>th</sup> of May at Huntingdon, a short distance west of Wauchope. Full details in the soon to be published May issue of the Club's bimonthly newsletter, Oxtales.

It is now only four weeks until the Club's 48<sup>th</sup> Annual Field Day. It is at the Wauchope Showground Hall on Saturday and Sunday the 8<sup>th</sup> and 9<sup>th</sup> of June, during the Kings Birthday Long Weekend. The Field Day Dinner will be at Port Macquarie Golf Club on Saturday night. Don't forget – the areas is a very popular holiday destination during the Long Weekend, so be sure to make accommodation bookings soon. You can camp at the Wauchope Showground in your tent, caravan, or motor home; details are on the Wauchope Showground website.

There are two club nets each week; the mid-week net from 7:30pm on Thursday nights, and the weekend net at 9am Sunday mornings. Both 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 <u>orarc.org</u>. The site contains a wealth of Amateur Radio items in addition to club information. The March 2024 issue of the club's bimonthly newsletter "Oxtales" is now online, and past issues are on the website as well. The club is also on Facebook; just search for Oxley Region Amateur Radio Club.

From Henry VK2ZHE For the Oxley Region Amateur Radio Club.

# **Central Coast Amateur Radio Club**

The Kariong club rooms are open on Saturdays from 10:30am. As always, members and visitors are most welcome.

At the VK2RAG Somersby repeater site, the 6-metre repeater, D-Star, Rad-Net DMR and 2m EchoLink, 70cm and 23cm, are all fully functional. The WICEN UHF repeater is currently only operating in P25 or Analogue FM modes.

The Club's Weekly net is on Thursday Nights at 8pm. It's on the VK2RAG 2 metre repeater – 146.725MHz with a 91.5Hz sub-audible tone, and on the CCARCNSW and HAM EchoLink conferences. It is also live video-streamed on the club's Facebook page.

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 <u>ccarc.org.au</u> – 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 File: 18-E-ID3.wav]

# Fisher's Ghost Amateur Radio Club

The Club is planning a Foundation licence course and assessment weekend for the 22<sup>nd</sup> and 23<sup>rd</sup> of June, in the Macarthur area. The Foundation course will be held on Saturday, and all licence class examinations will be on Sunday.

To register, contact the Club's Learning Organiser, Frank VK2FRW by the 1<sup>st</sup> of June. Head over to the contact page of the Club website, <u>fgarc.org.au.</u>

You can also find out more about the Club's activities on the website, and the Club's Facebook page can be found by searching for VK2FG.

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

### **Blue Mountains Amateur Radio Club**

The next meeting of the Club is on Friday the 7<sup>th</sup> of June at the clubrooms, 4 Moore Street Glenbrook, in the Blue Mountains – doors open from 7pm. Visitors and prospective new members are always welcome.

The clubrooms are also open twice a month from about 10am, on the morning of the first and third Saturdays – unless otherwise noted on the Club's Facebook page.

The Clubs has several weekly nets – we have details in "Activities on the air" later in this bulletin – and a new net time, Sunday nights at 8pm. On the 1<sup>st</sup> and 3<sup>rd</sup> Sunday of the month, the net is on the Club's 6 metre repeater, and on the 70cm repeater on the second and fourth Sunday.

Licence Upgrade classes run on Wednesday nights, both on Zoom and inperson at the Glenbrook clubrooms. Foundation classes are offered bimonthly.

With a 98% pass rate, the Club's courses and exam days fill-up quickly; please contact Club secretary, Irene VK2VAN via email to; <u>secretary@bmarc.org</u> for class dates, to register, or for more information.

More information about the Blue Mountains Amateur Radio Club, can be found on the website, at <u>www.bmarc.org</u>.

Steven VK2TSG President, Blue Mountains Amateur Radio Club.

# St George Amateur Radio Society

Next weekend is the Society's Don Edwards memorial slow Morse contest; that's Saturday the 18<sup>th</sup> and Sunday the 19<sup>th</sup> of May.

This contest commemorates Don VK2NV, whose operating was almost exclusively on CW. Don was always willing to assist other amateur to learn, or to improve, their Morse Code.

The contest aims to encourage all amateurs – but especially those who don't usually operate Morse – to take part. Contest rules are simple – sent by hand and received by ear, no more than 10 words per minute. Past contests have seen many successful contacts at 5 words per minute or less.

For some last-minute receiving practice, the ARNSW Morse practice beacon transmits at a variety of speeds on 3699kHz, and is on air 24 hours a day except during VK2WI News bulletins.

The contest times – on 80 metres on Saturday the 18<sup>th</sup> from 6pm to 9pm Sydney time; and on 40 metres, Sunday the 19<sup>th,</sup> from 1pm to 4pm.

For more details on the contest, and other activities of the St George Amateur Radio Society's, visit the website, <u>www.sgars.org</u>.

73 de Peter VK2EMU.

# [Manly-Warringah Radio Society]

And now with news from the Manly-Warringah Radio Society, here's Richard VK2SKY;

#### [Play File: 19-B-MRS0512.wav]

Duration: 2m03s In: This Wednesday is ... Out:.... the Manly-Warringah Radio Society.

#### [Transcript]

This Wednesday is lecture night at the Society, when we'll be diving into the exotic world of cryptography and encrypted communications! Our speaker, Rich Rademacher, is an embedded systems engineer with a background in quantum computing, aerospace, and Digital Signal Processing.

Keys are an essential part of encrypted communications, but how do you share keys between sender and receiver via a system that is not already secure, or how do you re-secure a compromised system? Find out how this Wednesday!

Last month's lecture on the ADX (Arduino Digital Transceiver) is now up on the club's YouTube channel, VK2MB-TV. You'll find a link in the text edition of this news, or check the blog on the club web site.

The club's new KiwiSDR web-connected HF receiver has been getting visitors from all over the world. We've "optimised it for Australian conditions", so you'll see things on our SDR that you likely won't find on any other! You can access it via the club web site (just click on the webSDR link on the main menu), or use the link in the text edition of this news. Give it a try and tell us what you think!

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, and visitors are always welcome. If you need directions, call in on the club's 2 metre repeater on 146.875, or check the club web site for details. The web site address is mwrs.org.au. The club is also on Facebook, X, and YouTube: just search for the club callsign, Victor Kilo 2 Mike Bravo.

73 Richard VK2SKY, Publicity Officer for the Manly-Warringah Radio Society.

[ April lecture on the ADX Arduino Digital Transceiver: <u>https://www.youtube.com/watch?v=cG4vHLs39iU</u> ] [ VK2MB KiwiSDR: <u>http://websdr.mwrs.org.au/8073/</u> ] [ About the VK2MB KiwiSDR: <u>https://www.mwrs.org.au/2024/03/05/the-kiwi-has-landed/</u> ] [ MWRS on the web: <u>https://www.mwrs.org.au/</u> ] [ MWRS on Facebook: <u>https://www.facebook.com/ManlyWarringahRadioSociety</u> ] [ MWRS on X: <u>https://x.com/VK2MB</u> ] [ MWRS on YouTube: https://www.youtube.com/@VK2MB ]

### Waverley Amateur Radio Society

The next monthly meeting is this coming Wednesday March the 15<sup>th</sup>. At the meeting, Andrew VK2GCO will be talking about "Satellites and Orbits".

As always, many members and friends meet up in the bistro, normally from around 6 pm, prior to the meeting for dinner and all are welcome.

The June meeting of the Society will be the AGM, followed by a special presentation by people from ARPANSA, which will be both in-person and streamed. More details in future bulletins.

Weekly nets continue on Monday evenings, at 8pm on the VK2RBV repeater, with net controller usually Richard VK2XRC or Bob VK2NRC.

Project days are scheduled for the first Saturday of the month, the next is on the 1<sup>st</sup> of June. Wednesday lunchtime get togethers, continue from Midday in the RSL bistro; these now adjourn after lunch to the ANZAC room for some practical activities.

You can keep up to date with the Waverley Amateur Radio Society on the web, at <u>vk2bv.org</u>. On the site you can also find out more about kits available, update your membership details, and use the contact form to send in any enquiries.

73 from Eric VK2VE Broadcast Publicity Officer

### [ID4 and Activities on the air]

#### [Play File: 20-E-ID4-AOTA4.wav]

Duration: 5m32s In: [IDENT 4] Out: ...the office phone, 02 9444 0123.

[Transcript] I'm Mathew VK2YAP.... And I'm Stuart VK2BMX.

It's time for your quick trip around the bands for this week, with; 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.

#### Mondays;

Westlakes ARC net 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, on 146.975MHz.

The **Blue Mountains ARC** D MR Net at 7:30pm on Brandmeister 50520, hosted by Ben VK2AFK.

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

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

#### Tuesdays;

National VKDMR Net: starts at 7:30pm on Talkgroup 505.

Blue Mountains ARC net from 8pm, 3543kHz.

St George ARS digital net, 8pm on 146.8MHz

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

[...continues]

#### Wednesdays;

Westlakes ARC net 9:30am on 7115kHz. 2 Metre nets throughout the week, see website for details.

Hunter Radio Group net 7:30pm, on 146.975MHz and EchoLink node 1474.

HADARC 8pm on 3608.5kHz

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

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

Armidale District ARC net 8:30pm on 3633kHz.

#### Thursdays;

Illawarra ARS net 12pm; VK2RMP 146.850 and VK2RUW on 146.675.

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

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

St George ARS 8pm, VK2RLE 146.8MHz.

The CCARC weekly net from 8pm on VK2RAG, 146.725MHz with 91.5Hz tone, and EchoLink.

#### Fridays;

Morning tea with HADARC 9am on 7106kHz.

Westlakes 9:30am on 7115kHz.

Amateur Radio Central West Group at 8pm, VK2RCW.

#### Saturdays;

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

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

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

#### Sundays;

Westlakes DMR Net from 8:00am, usually on Talkgroup 3802.

Oxley Region ARC from 9am, VK2RPM.

WICEN NSW nets; 6pm on Chatswood 2m or Kurrajong 70cm repeater, 6:30pm on DMR or HF, and 6:45pm on P25. Check website for details.

Don't forget to get <u>your</u> activities on the air <u>here</u>... send us through the details of your activity! Email the details, to <u>news@arnsw.org.au</u>... or leave a message on the office phone, 02 9444 0123.