

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

VK2WI News would like to hear from clubs and groups planning Amateur Radio activities; just email the details and contact information, to [news@arnsw.org.au](mailto:news@arnsw.org.au). We also welcome reports on recent activities.

General enquires can be directed to the ARNSW office via email, to [office@arnsw.org.au](mailto:office@arnsw.org.au), or by leaving a phone message on 02 9444 0123.

A reminder that the 2023 AGM of Amateur Radio NSW is at 11am next Saturday the 22<sup>nd</sup> of April, here at VK2WI Dural. Online attendance will again be available; information was included in the email sent to members that have elected to receive their notices electronically, and there will also be a link on the home page of the ARNSW website. Note that teleconference details have changed from last year.

Tonight, we also 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.

## **After a long absence...**

The balun buildathons are back.

Here at VK2WI Dural, on Sunday the 11<sup>th</sup> of June.

You'll have your choice of constructing a 1:1 or a 4:1 balun from a kit. You can also order high quality Kevlar antenna wire. All items must be pre-ordered and paid for on the day.

For enquiries or bookings, you can email [balun@arnsw.org.au](mailto:balun@arnsw.org.au) or leave a phone message with the office, on 02 9444 0123.

We will have more details in a future VK2WI News bulletin.

*73 AI VK2OK*

*Function and Events Co-ordinator for AR New South Wales.*

# Weekly Solar and Geophysical Report

For the period of the 7<sup>th</sup> to the 13<sup>th</sup> of April.

First, the summary of activity;

Dates across the columns are	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	13 <sup>th</sup>
10cm Flux	136	136	140	140	143	154	160
Fredericksburg A-Index (AFr)	7	5	5	11	6	4	5
Australian Index (Aaus)	4	2	2	8	5	2	4 estimated
T index	122	125	122	132	119	114	122

Solar activity mostly remained below warning threshold, reaching R1 levels on the 8<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup>, due to M class flares. The largest flare was an M2.9 at 0146UTC on the 8<sup>th</sup>. Geomagnetic activity was at low to moderate levels, remaining below warning threshold.

F2 critical frequencies in Southern Australia were enhanced 20% on the 7<sup>th</sup> and 8<sup>th</sup>; enhanced 25% during day and 15% during night and after local dawn on the 9<sup>th</sup>; 20 to 25% enhanced on the 11<sup>th</sup>; 15% during the day and 25% during the night on the 12<sup>th</sup>; and 20% during the day and up to 25% enhanced, during local night on the 13<sup>th</sup>.

The forecast, issued on the 14<sup>th</sup> of April, through until the 20<sup>th</sup>;

Solar activity is expected to be at R0 to R1 level, with a chance of some R2 flares. Geomagnetic should mostly remain at G0 level.

Maximum usable frequencies in the Southern Australian region are expected to be from near predicted monthly values, up to 25% enhanced. Isolated shortwave fadeouts are possible.

*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.

In March, we had a;

Minimum of 134, Average of 158, and a Maximum of 188  
With peak dates from the 1<sup>st</sup> to the 11<sup>th</sup>, and the 26<sup>th</sup> to the 29<sup>th</sup>

So far for April, we are expecting a;

Minimum of 125, Average of 148, and a Maximum of 168  
With peak dates from the 13<sup>th</sup> to the 27<sup>th</sup>.

And looking ahead to May, we are expecting a;

Minimum of 135, Average of 148, and a Maximum of 150  
With peak dates from the 10<sup>th</sup> to the 24<sup>th</sup>.

*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.

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*Duration: 3m10s*

*In: "There is an interesting ..."*

*Out: "I'm Onno VK6FLAB"*

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For more information about this series, including audio, transcripts and other useful amateur radio resources, Onno's website is; [vk6flab.com](http://vk6flab.com); you can follow him on Twitter, @VK6FLAB; and you can contact Onno by email, to [cq@vk6flab.com](mailto:cq@vk6flab.com).

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## WICEN News

This weekend, WICEN provided communications support for the NSW Pickleball Open at Wahroonga in northern Sydney. Now that that's done, things look quiet for the next few weeks.

Coming up next month is Dementia Australia's Memory Walk at Leichhardt Oval in Sydney, on the 21<sup>st</sup> of May. Memory Walks last just a few hours, so they are ideal "starter events" for new – or rusty – WICEN members to get some field experience.

To participate in any event, or to find out more about WICEN, email [wicen.ops@vrarescue.org](mailto:wicen.ops@vrarescue.org).

The WICEN meetup earlier this morning, here at VK2WI Dural, was dedicated to learning about VRA 62, the WICEN tactical communications vehicle. But, don't worry if you missed it; the next meetup is on Sunday the 7<sup>th</sup> of May.

WICEN's voice nets are at 6pm and 6:30pm every Sunday, using FM voice, DMR or HF voice, depending on the week. All WICEN members and other Amateurs are welcome to join in.

Next Sunday, the 6pm net will be on the Chatswood 2m FM repeater, 147.150MHz, with net controller VK2WIC; the 6.30pm net will be on the WICEN VHF DMR network.

WICEN NSW is a communications support squad of VRA Rescue NSW, providing skilled radio communicators, in times of emergency. WICEN also supports local community events; which provide practical training in tactical field communications, and build general radio skills.

To find out more, visit the WICEN NSW web site at;

N - S - W DOT W - I - C - E - N DOT O - R - G DOT A - U

WICEN is also on Facebook and on Twitter @wicennsw [at WICEN N S W]; there, you can find photos and information about current and previous activations. For information about other WICEN groups around Australia, visit the website at [wicen.org.au](http://wicen.org.au) – and click on the map.

[WICEN NSW web site: <https://nsw.wicen.org.au/> ]

[WICEN NSW facebook at <https://www.facebook.com/WICENNSW> ]

[WICEN NSW twitter at <https://twitter.com/wicennsw> ]

## Club News

We start this week from the Oxley Region Amateur Radio Club; and those at the well-attended monthly Coffee Morning last Thursday, rounded off a very enjoyable morning by examining the new VK2RCN 6 metre repeater, before it was taken to site for installation that afternoon. It's now in service on 53.8MHz from Telegraph Point, and reports indicate excellent coverage with a particularly strong signal in Port Macquarie and Wauchope. The repeater input frequency is 52.8MHz, and no CTCSS tone is required. The VK2RCN APRS digipeater will be installed when a new TNC is received.

The next Club Friday Night Get Together is at 7 pm this Friday the 21<sup>st</sup> of April, at the SES Building in Port Macquarie.

Its now only eight weeks until the Club's annual Field Day on Saturday and Sunday the 10<sup>th</sup> and 11<sup>th</sup> of June 2023; during the Kings Birthday long weekend. The field day is at Wauchope Showground Hall, with Field Day dinner at Port Macquarie Golf Club on Saturday night. The Field Day will have all the usual activities including fox hunts, trade displays on both days, trash and treasure, and home brew display. Be sure to book accommodation, well ahead.

Candidates interested in attending either a Foundation Course , or assessments for Standard and Advanced licences, can contact the club via the contact form on the website, or write to PO Box 712 Port Macquarie NSW 2444. The next course will run, once sufficient candidates have registered.

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.

To find out more about the Oxley Region Amateur Radio Club, visit the website at [orarc.org](http://orarc.org). The March 2023 edition of the club's bimonthly newsletter "Oxtales" is now online, and past issues are on the website as well. 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 Club's Kariong Clubrooms are open every Saturday from 10am. As always, members and visitors are most welcome.

At VK2RAG Somersby, D-Star, RadNet DMR and 2m EchoLink services are fully functional.

The Somersby WebSDR is online at [websdr.ccarc.org.au](https://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, and the weekly Net is at 8pm on Thursday night. Both nets are on the VK2RAG 2 metre repeater - 146.725MHz with a 91.5Hz sub-audible tone, and on the CCARCNSW and HAM EchoLink conferences.

The Thursday evening net 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 [ccarc.org.au](https://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.*



## Blue Mountains Amateur Radio Club

The next meeting returns to the usual schedule – and will be on Friday the 5<sup>th</sup> of May, at the Club Rooms, 4 Moore Street Glenbrook, in the Blue Mountains. Doors open at 7pm, and visitors and prospective new members are always welcome.

The Club has several weekly nets – we have details in “Activities on the air” later in this bulletin. There is also a DMR Net on Monday nights – see the BMARC website for details.

Foundation licence and Upgrade courses continue at the Club, with a course and assessment weekend concluding today. Courses and exam days do fill-up quickly, so please contact Club secretary, Irene VK2VAN, by email to; [secretary@bmarc.org](mailto:secretary@bmarc.org) for more information, or to register your place.

For more information about the Blue Mountains Amateur Radio Club, visit the website, at [www.bmarc.org](http://www.bmarc.org).

*Steven VK2TSG  
President, Blue Mountains Amateur Radio Club.*

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## Manly-Warringah Radio Society

This Wednesday is lecture night at the Society, where John Mobbs will talk about Television Manufacturing in Australia - yes, it used to be done here! John originally came to Australia when his employer, Marconi Wireless, was acquired by the medical colour TV unit of the company Smith Cline and French, who brought him out here. The rest, as they say, is history...

Video of last month's Show and Tell night, which featured guest judges Dick VK2DIK and Dave Jones of EEV Blog fame, should be up soon on the club YouTube channel, VK2MB-TV.

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](http://mwrs.org.au), that's M-W-R-S dot O-R-G dot A-U.

*73 Richard VK2SKY*

*Publicity Officer, Manly-Warringah Radio Society.*

## Waverley Amateur Radio Society

The next meeting is coming up at 7:30pm this Wednesday the 19<sup>th</sup> of April, in the ANZAC room of Rose Bay RSL Club, Vickery Avenue, Rose Bay.

Tony VK2KZ will be talking about and demonstrating GNURadio, a free & open-source software development toolkit for implementing software radios. It can be used with readily available low-cost external RF hardware to create software-defined radios, or without hardware in a simulation environment. It is widely used in research, industry, academia, government, and by hobbyists to support both wireless communications research and real-world radio systems. Tony will build and explain several GNURadio flowcharts including instrumentation, FM demodulation and Transmission. If it all works, this will culminate in a Transverter, so bring your handheld and expect to hear it play ABC FM, or any other station you like! Many members partake of dinner in the club's bistro prior to the meeting from about 6pm and all are welcome; especially any visitors from other clubs or out of town.

Regular Monday evening nets are at 8pm on VK2RBV, 438.1125 MHz with a -5.4 MHz offset and 91.5Hz tone for access.

Wednesday lunchtime get togethers, are back on in the RSL bistro; these now adjourn after lunch to the ANZAC room where some practical activities are undertaken. Other activities continue, either in person or Zoom; see the society's website for details.

The first Saturday of the month, is "project day", also in the ANZAC room of Rose Bay RSL Club. The next one is scheduled for May 6<sup>th</sup>, starting at 1pm. There will be a workshop to build and test a 7 element, 70cm Yagi antenna, with parts supplied including a wooden boom, driven element with coax feedline and plug. Attendees will need to bring some tools to assemble the antenna for testing. If you are interested, please email [secretary@vk2bv.org](mailto:secretary@vk2bv.org) before Wednesday the 26<sup>th</sup> of April, to reserve your place, and so sufficient materials are available.

You can keep up to date with the Waverley Amateur Radio Society on the web, at [vk2bv.org](http://vk2bv.org). On the site you can also order kits available, update membership details, and use the contact form for any enquiries.

*73 from Eric VK2VE  
Broadcast Publicity Officer.*

## St George Amateur Radio Society

The Society's Don Edwards memorial slow Morse Contest is on again next month; over the weekend of the 20<sup>th</sup> and 21<sup>st</sup> of May.

The contest commemorates Don VK2NV, who became a silent key in early 2021. Don's operating was almost exclusively on CW, and he often encouraged club members to either learn Morse or increase their speed.

The contest aims to encourage all amateurs to try give Morse a go. The main rule is that contacts should be no more than 10 words per minute; many contacts in last year's contest were at 5 words per minute or less. So, if you learnt Morse code years ago to get your licence, and then hid your Morse key at the back of the cupboard – this contest is a good opportunity to dig it out again and have a go.

If you have never learnt Morse code, there are many online training websites. A good source of practice is the ARNSW Morse practice beacon on 3699kHz, which is on air 24 hours a day except during VK2WI News bulletins. Also, the American Radio Relay League produce Morse practice MP3 files which can be downloaded from [www.arrl.org](http://www.arrl.org).

The Don Edwards memorial slow Morse contest will be held in two parts. Saturday the 20<sup>th</sup> of May from 6pm to 9pm on 80 metres, then Sunday 21<sup>st</sup>, 1pm to 4pm on 40 metres. The Society looks forward to working you on air.

Details about all the Society's activities are available on the website, [www.sgars.org](http://www.sgars.org).

*73 de Peter VK2EMU*

*Publicity Officer, St George Amateur Radio Society.*

## Hornsby and Districts Amateur Radio Club

Last Tuesday saw the usual mid-monthly experimenter's meeting, where members and visitors get their hands dirty looking at members projects and helping each other with shack issues.

For some time, the Club had been in discussions to find a larger and more welcoming venue for the mid-monthly meeting, and this was the first at the Hornsby Rifle Club, next to the Mount Wilga Hospital. And the new venue didn't disappoint. With warm heating, many comfy lounge chairs and tables to demonstrate projects - it was a great evening at the new and larger venue.

Of note was Steve VK2AAV's custom designed power supply in its early stages and Bob VK2BMU's 2meter radio which still had 'Channel 8' as a rotary channel repeater for those who remember Dural in the 1970's.

Future mid-monthly meetings will continue at the Hornsby Rifle Club, with the larger monthly meeting remaining at Mount Colah. And at the next Monthly meeting, there will be discussions on antenna efficiency and what works well for a range of situations. There will also be carry over questions from the last talk on DMR.

So, join us at HADARC for another great evening on the 25<sup>th</sup> of April, at Mt Colah.

73 for now and let's keep radio-active,

*Matt VK2BAI  
HADARC President.*

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## 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.

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

**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, 146.9Mhz and 438.025MHz.

**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 on VK2RBV, 438.1125MHz with 91.5Hz tone.  
Activities online and on air; see website.

### *Tuesdays;*

**National VKDMR Net:** from 7:30pm on Talkgroup 505.

**Blue Mountains ARC** net from 8pm on 3543kHz.

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

### *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 146.9MHz.

**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;***

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

**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.

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

***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;***

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

**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.

***Sundays;***

**Westlakes** DMR Net from 8:30am, usually on Talkgroup 3802; listen to Talkgroup 505 at 8:28am.

**Oxley Region ARC** from 9am, VK2RPM 146.7Mhz with 91.5Hz tone.

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