

## **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.

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.

## Events at ARNSW

Next weekend sees a return of some popular events to VK2WI Dural. It's the last Sunday of the month – and another “Members Morning Meetup”.

The site will be open from about 9:30am, with Trash and Treasure, boot sales and disposals tables available; and the Centenary Building will be open as well, with tea, coffee, and cold drinks. While the BBQ is currently not available, there are several food retailers nearby, and the VK2WI site provides pleasant surrounds and a covered picnic area.

Later in the day – from just after noon – we welcome back those members interested in the Radio Experimenter's Group.

After a ‘short’ break brought about by the pandemic, the Board of ARNSW has reviewed ways to support those members interested in experimentation with the technology of radio and in building their own radio equipment.

The Radio Experimenter's group returns with a broadened scope and renewed terms of reference, with plans to support a broader range of activities and interest in radio homebrewing and experimentation.

We invite members to come along to share their recent activities and projects, along with ideas for future activities and further developing the group. An ARNSW board representative will be in attendance, and we hope to have online facilities available.

Then, next month – if you aren't planning on travelling for the King's birthday long weekend, don't forget the buildathon on Sunday the 11<sup>th</sup> of June. Starting at 10am, members will be able to build baluns and dipoles, with balun kits and high-quality Kevlar antenna wire at a discount price. All items must be pre-ordered and paid for on the day.

For buildathon 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.

# Weekly Solar and Geophysical Report

For the period of the 12<sup>th</sup> to the 18<sup>th</sup> of May;.  
First, the summary of activity;

Dates across the columns are	12 <sup>th</sup>	13 <sup>th</sup>	14 <sup>th</sup>	15 <sup>th</sup>	16 <sup>th</sup>	17 <sup>th</sup>	18 <sup>th</sup>
10cm Flux	149	144	140	135	134	138	151
Fredericksburg A-Index	15	12	9	6	10	5	8
Australian A-Index	14	7	4	2	4	1	0 estimated
T index	107	108	106	104	101	88	89

Solar activity reached R2 level on the 16<sup>th</sup>, with an M9.6 flare at 1643UTC; and R1 on the 18<sup>th</sup>, with six M-class flares.

Geomagnetic activity was low to moderate, remaining below warning threshold. reached G1 levels on the 7<sup>th</sup>, and the 10<sup>th</sup>, and was low to moderate on other days. A weak geomagnetic impulse of 19<sup>th</sup> nanoTelsa was observed at 0631UTC on the 12<sup>th</sup> of May.

F2 critical frequencies in Southern Australia remained near predicted monthly values, with enhancement of 15% observed during local day on the 12<sup>th</sup>.

The forecast, issued on the 19<sup>th</sup> of May, through until the 25<sup>th</sup>;

Solar activity is expected to be at R1 to R2 levels; two active solar regions have rotated onto the visible solar disk and are expected to produce M-class flares for the entire forecast period.

Geomagnetic conditions should be quiet, with a chance of G1 activity on the 21<sup>st</sup> and 22<sup>nd</sup> due to wind stream effects, and a glancing blow from a CME first observed on the 17<sup>th</sup>.

Maximum usable frequencies in the Southern Australian are expected to be near predicted monthly values, with mild depressions possible on the 21<sup>st</sup> to 22<sup>nd</sup>, due to elevated geomagnetic activity.

*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 125, Average of 145, and a Maximum of 178  
With peak dates from the 12<sup>th</sup> to the 22<sup>nd</sup>, and the 29<sup>th</sup> to the 30<sup>th</sup>.

So far for May, we are expecting a;

Minimum of 134, Average of 149, and a Maximum of 180  
With peak dates from the 1<sup>st</sup> to the 12<sup>th</sup>, and the 29<sup>th</sup> to the 31<sup>st</sup>.

And looking ahead to June, we are expecting a;

Minimum of 140, Average of 154, and a Maximum of 165  
With peak dates from the 1<sup>st</sup> to the 18<sup>th</sup>; and the 25<sup>th</sup> to the 30<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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### **[Play File: 15-FOAR060.wav]**

*Duration: 4m40s*

*In: "This technology-driven community ..."*

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

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## [WICEN News]

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

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### [Play File: 17-E-WNS0521.wav]

*Duration: 2m21s*

*In: " This past week ..."*

*Out: "... click on the map."*

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[Transcript]

*This past week has been National Volunteer Week, with the theme "The Change Makers". Amateur Radio operators volunteering through WICEN and VRA Rescue NSW, have been using their radio skills to assist the community. You too can be part of the action when you join WICEN!*

*This morning, WICEN provided communications support for Dementia Australia's Memory Walk at Leichhardt Oval, in Sydney. The Memory Walks last just a few hours, so they are ideal "starter events" for new (or rusty) WICEN members to get some field experience. Why not give the next one a go?*

*Then, on 16-18 June, WICEN will provide safety comms support for the Glow Worm Tunnel Marathon in the Blue Mountains.*

*Finally, NSW State Emergency Services have their Bush Search and Rescue "NavShield" event on the weekend of 15-16 July, with setup on the Friday afternoon. Five WICEN operators are needed for this event: two at Base, and one at each of three course checkpoints.*

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

*WICEN nets take place every Sunday evening at 6pm and 6.30pm, 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 specialist support squad of VRA Rescue NSW, providing skilled radio communicators in times of emergency. WICEN also supports local community events: these provide practical training in tactical field communications, and other radio skills.*

*To find out more, check out the WICEN NSW web site, at [nsw.wicen.org.au](http://nsw.wicen.org.au), that's*

*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 recent and upcoming WICEN activities.*

*For information about other WICEN groups around Australia, visit the web at [wicen.org.au](http://wicen.org.au) – and click on the map.*

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[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> ]

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## Club News

We start this week from the Oxley Region Amateur Radio Club; and last Saturday's Annual Antenna Shootout, was a great success. After a sumptuous morning tea, technical testing took place in earnest. The day concluded with a delicious sausage sizzle lunch followed by a baked cheesecake dessert. Host for the day, Larry VK2CLL, won the shootout with his 7 element, 70cm Yagi.

Then, at the Friday Night Get together on the 19th of May, equipment for linking the VK2RPM 2 metre repeater, with the VK2RCN 147.0MHz repeater, was assembled. It is hoped to have the link installed in time for the Field Day on the June long weekend... which is now, only three weeks away.

The Club's annual Field Day is on Saturday and Sunday the 10<sup>th</sup> and 11<sup>th</sup> of June 2023. The field day is at the spacious 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 competition and display. Breakfast and lunch from the barbeque will be available on both days. Camp sites at the showground or accommodation should be booked soon, as the area is a popular tourist destination for the June long weekend.

Those interested in Foundation training weekends, or assessments for the Standard or Advanced licence, can contact the club via the website contact form, or by mail to PO Box 712 Port Macquarie NSW 2444. A date will be set when sufficient candidates have registered their interest.

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 issue of the club's bimonthly newsletter "Oxtales" is now online, and past issues are on the website as well; and 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 clubrooms are open on Saturdays from 10:30am; As always, members and visitors are most welcome.

Next Saturday, May the 28<sup>th</sup>, is the monthly Show & Tell. This will be a general day with no set topic; so, bring along what you fancy. If you don't want to bring an item, take a few photos and talk to them using the projector.

On the weekend of June 17<sup>th</sup> and 18<sup>th</sup> a Foundation and education training weekend is planned; with training on the Saturday and exams on the Sunday. If you already hold a current amateur licence and are interested in upgrading to Standard or Advanced, please contact the club to make arrangements.

Limited places are available, and bookings are essential; contact the club's education facilitator, Karen VK2YX by Thursday the 1<sup>st</sup> of June. You can email [education@ccarc.org.au](mailto:education@ccarc.org.au) or telephone 02 4340 2500, and there are further details on the club's website.

At VK2RAG Somersby, D-Star, RadNet DMR and 2m EchoLink services are fully functional. The Somersby WebSDR is online at [websdr.ccarc.org.au](http://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](http://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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## **St George Amateur Radio Society**

The Society's VK2RDX 2 metre repeater, at Mt. Bindo in the Western Blue Mountains, has been on air for over 40 years.

Due to recent interference on the input frequency, the Society has decided to fit a CTCSS tone to the input. The tone will be 91.5Hz, with planned implementation in July. This advanced notice is given so that users of the of the repeater can enable CTCSS on their radios.

Details about all of the Society's repeaters, along with the Society's other activities, are 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**

Next Tuesday is the Club's monthly meeting, at the Mount Colah Community Centre, starting at 8pm.

This is a great chance to catch up with friends and grab a few bargains at the back table. At this meeting we will hear about Valve construction, have open floor questions about our project and also run the annual AGM.

At the AGM, all paid-up members have the opportunity to vote for the HADARC Committee and related Club roles. Apart from reviewing the past year, please come along to help set the Club up for the next exciting year ahead.

Did you know that a Field strength meter is actually a simplified receiver? The RF signal is detected and fed to a microammeter, which is often scaled in dB. What is interesting, is that some older field strength meters need no additional source of power to operate. Have a look in your shack and see if one of your SWR bridges has a Field Strength setting; if it does, try adding a short antenna – say, 15cm – to watch your SSB transmission on the meter without even connecting it to your antenna system. Let us know if you tried this simple experiment!

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

*Matt VK2BAI  
HADARC President.*

## [Manly-Warringah Radio Society]

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

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### [Play File: 19-E-MRS0521-ID4.wav]

*Duration: 2m25s*

*In: " Club members Colin ... "*

*[Out:....IDENT 4]*

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*[Transcript]*

*Club members Colin VK2JCC, Carmel VK2CAR, Stuart VK2BMX and others continue to activate VK2VMP from the radio room on board HMAS Vampire. Have you worked this warship yet? Activity is mainly on 20 and 40 metres, in CW and sideband modes.*

*The "Park Rangers" (Colin, Carmel, Stuart, and others) were out portable again on 40 metres on Friday, activating Mount Kuring-Gai Oval in northern Sydney. Why not get out of YOUR shack and into the nearest park, and have on some portable fun on the radio?*

*Colin's lecture on Wednesday's night, about "Recycling Plastic for Amateur Radio Use", was well received. He demonstrated how to recycle High Density Polyethylene containers into new products for Amateur use. If you missed it, don't worry, it will soon be up on YouTube.*

*Club lectures, and videos on many other Amateur Radio topics, can be found on the club's YouTube channel VK2MB-TV. Just go to YouTube and search for the club callsign, VK2MB.*

*Next Wednesday, the 31st, is the fifth Wednesday of the month, which means another Show and Tell night! The theme this time is Batteries and Battery-operated Equipment. If you have any noteworthy specimens of either, bring it along and perhaps win a prize for the Best Gear and/or Best Story. Hopefully there will be some exotic home-brew batteries on display!*

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

*73 Richard VK2SKY, MWRS Publicity Officer*

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[ MWRS on the web: <https://www.mwrs.org.au/> ]

[ MWRS on Facebook: <https://www.facebook.com/ManlyWarringahRadioSociety> ]

[ MWRS on Twitter: <https://twitter.com/VK2MB> ]

[ MWRS on YouTube: <https://www.youtube.com/@VK2MB> ]

## 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** *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

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

**Oxley Region ARC** from 9am, VK2RPM.

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