

## **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

Coming up next Sunday the 29<sup>th</sup> of July, is another “Members Morning Meetup” here at VK2WI Dural.

The site will be open from about 9:30am, with Trash and Treasure, boot sales and disposals tables available. The Centenary Building will be open as well, with tea, coffee, and cold drinks; and, 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 once again welcome members interested in the Radio Experimenter’s Group.

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.

# Weekly Solar and Geophysical Report

For the period of 14<sup>th</sup> to the 20<sup>th</sup> of July.

First, the summary of activity;

Dates across the columns are	14 <sup>th</sup>	15 <sup>th</sup>	16 <sup>th</sup>	17 <sup>th</sup>	18 <sup>th</sup>	19 <sup>th</sup>	20 <sup>th</sup>
10cm Flux	181	179	184	180	219	189	184
Fredericksburg A-Index	17	9	13	19	16	7	10
Australian A-Index	8	5	3	16	8	2	5 estimated
T index	110	117	117	118	113	105	105

Solar activity was at R1 levels on the 14<sup>th</sup> of July with one M-class flare; and on the 15<sup>th</sup> and 16<sup>th</sup>, both with three M-class flares. R2 levels were observed on the 17<sup>th</sup> with two M-class flares, and on the 18<sup>th</sup> with four M-class flares. The 19<sup>th</sup> returned to R1 levels with two M-class flares.

Geomagnetic activity was low to moderate all week, remaining below warning threshold; however, weak geomagnetic impulses were observed; 12 nanoTesla on the 14<sup>th</sup>, 8 nanoTesla on the 16<sup>th</sup>, and 11 nanoTesla on the 20<sup>th</sup>.

F2 critical frequencies in Southern Australia remained mostly near predicted monthly values, with enhancement of 15% observed during local day on the 14<sup>th</sup>; 20% during local day on the 15<sup>th</sup>; and 15% during local day on the 17<sup>th</sup>.

The forecast, issued on the 21<sup>st</sup> of July, through until the 27<sup>th</sup>;

Solar activity is expected to be at R1, with a chance of isolated R2 flares. Geomagnetic activity is expected to mostly be at G0, with a chance of G1 early in the week due to lingering effects from a recent CME.

Maximum usable frequencies should be mostly near predicted monthly values; however, isolated Shortwave fadeouts are possible on daylight circuits.

*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 June, we had a;

Minimum of 144, Average of 162, and a Maximum of 180  
With peak dates from the 2<sup>nd</sup> to the 10<sup>th</sup>, and the 19<sup>th</sup> to the 24<sup>th</sup>.

So far for July, we are expecting a;

Minimum of 154, Average of 179, and a Maximum of 219  
With peak dates from the 11<sup>th</sup> to the 25<sup>th</sup>

And looking ahead to August, we are expecting a;

Minimum of 155, Average of 167, and a Maximum of 175  
With peak dates from the 6<sup>th</sup> to the 9<sup>th</sup>, and the 13<sup>th</sup> to the 18<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-FOAR088.wav]**

*Duration: 5m21s*

*In: "Amateur Radio as a hobby ..."*

*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-WNS0723.wav]

*Duration: 1m53s*

*In: " WICEN was active ..."*

*Out: "... at wicen.org.au."*

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#### [Transcript]

*WICEN was active last weekend in Goulburn River National Park, providing communications for Australia's largest Search and Rescue Training exercise, the New South Wales SES Bush Search and Rescue NavShield. Check out our social media channel for the photos or click on the link in the text edition of this bulletin.*

*[<https://www.facebook.com/WICENNSW/posts/pfbid02zYDD5FU3cJ9Nkt5hUyT5d8q4jtfogVBi9GfTcdpBeaus7r5hgxepaVXUZK0mRwxQI>]*

*The WICEN AGM is on Saturday 5 August. Members should have received an email with the details by now.*

*On Sunday the 6th, the WICEN monthly meetup here at Dural will be a working bee. The previously advertised communications exercise has been deferred.*

*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, 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 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](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).*

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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> ]

## Club News

We start this week from the Oxley Region Amateur Radio Club.

The Club's Annual General Meeting is at 2pm on Saturday the 5<sup>th</sup> of August 2023, in the SES Building in Port Macquarie. A short August Monthly General Meeting will be held at the conclusion of the AGM.

Members are reminded that membership subscriptions became due on the 1<sup>st</sup> of July 2023. Thank you to the members who have already renewed, and Prompt payment of outstanding renewals will be greatly appreciated.

Installation of the VK2RPM RadNet DMR repeater at Middle Brother has been delayed, but the club is hoping to get it installed on air soon.

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 [orarc.org](http://orarc.org). The May 2023 issue of the club's bimonthly newsletter "Oxtales" is now online, and past issues are on the website as well. The July issue featuring a detailed report on the Annual Field Day is in preparation, and will be published soon. You can also find the club on Facebook, just search for Oxley Region Amateur Radio Club.

*From Henry VK2ZHE  
For the Oxley Region Amateur Radio Club.*

## **Hunter Radio Group**

The Group's "Christmas in July" luncheon is next Saturday the 29<sup>th</sup> of July, at Windale Bowling Club. The booking is for 12 noon, to eat by 1 pm.

There will be alternate plates of chicken & beef, a bread roll, and a dessert.

Members wishing to attend should contact the Social Secretary, Ardel Prout or the President, Richard VK2AUS, as soon as possible so that the Restaurant can be advised of numbers attending.

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## Central Coast Amateur Radio Club

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

Next Saturday the 29<sup>th</sup> of July, the club will be holding a workshop introducing the Arduino microcontroller. This workshop will be a practical introduction; not teaching lots of theory or how to program, rather, covering the basics you need to get started. Please arrive at 10:30am for an 11am start.

Notifications have been emailed out for the club's Annual General Meeting, which will be at the clubrooms at 1pm, Saturday the 5<sup>th</sup> of August. Note that only current financial members are eligible to vote and be nominated for positions. On that note, members are reminded that renewals are due; membership forms have been sent out and need to be completed, as Unfinancial members will be removed from contact lists after July 30.

There are rumours of something brewing in the Central Coast area. It's not clear exactly what, but it might be a good idea to write down Sunday the 5<sup>th</sup> of May, 2024 in your diary... and keep an ear out for updates.

At VK2RAG Somersby, D-Star, RadNet DMR and 2m EchoLink services are fully functional; the 23cm repeater is currently off-air, as it is being replaced. 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.*

## **Fisher's Ghost Amateur Radio Club**

The next General Meeting of the Club is on this Wednesday the 26<sup>th</sup> of July, in Block M, Campbelltown School of Performing Arts, Beverley Road Campbelltown. The meeting starts at 7:30pm, and visitors wishing to learn more about the hobby of Amateur Radio are most welcome to attend.

Weekly nets are on Thursday evenings from 7:30pm on the Club repeater, VK2RFG. Anyone is welcome to check-in. The repeater has a negative 7MHz input and a 91.5Hz CTCSS tone is required for access.

To find out more about the Club's activities, visit the website at [fgarc.org.au](http://fgarc.org.au), and Facebook, by searching for VK2FG.

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

## St George Amateur Radio Society

Last weekend was the Society's July foundation training weekend, at Sutherland. All candidates felt confident of their success in assessments for Foundation Licenses; many have already begun to study for a higher licence level. We look forward to the candidates being issued with their AOCs and licenses and them getting on the air.

The Society is now planning its next Foundation Licence Training and Assessment weekend. Anybody interested in either obtaining their Foundation Licence or undertaking a licence upgrade assessment, can contact the Society's Education Officer by email, to; [education@sgars.org](mailto:education@sgars.org).

Previously, we mentioned planned implementation of a CTCSS tone on the VK2RDX 2-metre repeater; this change has now been postponed until at least September.

The next gathering of the Society will be on Wednesday the 2<sup>nd</sup> of August, at the usual venue of the First Kyle Bay Scout Hall, Donnelly Park, Kyle Parade Connells Point.

And don't forget, Next Saturday evening is the Society's 80 Metre Trophy contest. In preparation for the RD in August, this contest is open to all operators using analogue and digital voice modes, CW morse code and other digital modes such as RTTY and SSTV.

The contest commences at 6pm local time, in one hour time slots until midnight. Extra points can be earned in the last hour and by making contact with the Society's Club station, VK2LE.

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.*

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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** *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.