

## **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.

Daylight-Saving Time ended earlier today, and since VK2WI News maintains the same local times of 10am and 7:30pm, HF propagation may be different. If you have reception difficulties on radio, you can also listen to the bulletins streamed live from our website, [arnsw.org.au/audio](http://arnsw.org.au/audio).

## **A note from our News Editor.**

VK2WI News reports on a wide variety of activities relating to Amateur Radio.

We are currently seeking expressions of interest, for a contributor to provide a regular feature report on contesting activity, with particular focus on activities in the Australian and Pacific region.

The report could be weekly, fortnightly, or monthly; ideally as an audio contribution, alternatively, as a script suitable for a live read.

VK2WI News bulletins are only made possible by the continued effort of our broadcast team volunteers. We welcome any interested members to join the team; roles are available in both operating at VK2WI, and production support activities which can also be done remotely.

For more information or any enquiries, contact the VK2WI News team via email, [news@arnsw.org.au](mailto:news@arnsw.org.au).

*Mathew VK2YAP  
News Editor, VK2WI News.*

# Weekly Solar and Geophysical Report

For the period of the 24<sup>th</sup> to the 30<sup>th</sup> of March.

First, the summary of activity;

Dates across the columns are	24 <sup>th</sup>	25 <sup>th</sup>	26 <sup>th</sup>	27 <sup>th</sup>	28 <sup>th</sup>	29 <sup>th</sup>	30 <sup>th</sup>
10cm Flux	158	160	159	158	159	148	140
Fredericksburg A-Index (AFr)	40	12	6	2	4	4	11
Australian Index (Aaus)	26	9	6	1	4	3	16 estimated
T index	89	139	137	137	146	137	151

Solar activity remained below warning threshold from the 24<sup>th</sup> until the 29<sup>th</sup>, but reached R3 on the 29<sup>th</sup> with one X1.2 flare and two M-class flares. The 30<sup>th</sup> saw solar activity at R2, with two M-class flares.

Geomagnetic activity was at G2 levels on the 24<sup>th</sup>, then remained low from the 25<sup>th</sup> through the 29<sup>th</sup>, before increasing to G1 level on the 30<sup>th</sup>.

F2 critical frequencies in Southern Australia were depressed 40% during local day on the 24<sup>th</sup>, before recovering at night to near predicted monthly values. Conditions were then significantly enhanced; 35% during day on the 25<sup>th</sup>; 20% during the day on the 26<sup>th</sup>; 30% to 40% throughout on the 27<sup>th</sup>; 20% to 30% on the 28<sup>th</sup>; 20% during the day and 30% at night on the 29<sup>th</sup>; and 35% during the day and 25% during local night, on the 30<sup>th</sup>.

The forecast, issued on the 31<sup>st</sup> of March, through until the 6<sup>th</sup> of April;

Solar activity is expected to be at R0 level, with a chance of R1 periods. Geomagnetic should mostly remain at G0 level, though there is a chance of G1 activity on the 1<sup>st</sup> of April, and again from the 3<sup>rd</sup> to the 5<sup>th</sup>, due to elevated solar wind stream effects.

Maximum usable frequencies in the Southern Australian region are expected to be up to 15% enhanced for most of the week. Mild depressions are possible between the 4<sup>th</sup> to the 6<sup>th</sup> of April, if solar wind stream effects cause an increase in 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.

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>

As we begin April, we are expecting a;

Minimum of 130, Average of 141, and a Maximum of 160  
With peak dates from the 15<sup>th</sup> to the 27<sup>th</sup>.

And looking ahead to May, we are expecting a;

Minimum of 130, Average of 142, and a Maximum of 160  
With peak dates from the 12<sup>th</sup> to the 19<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-FOAR044.wav]**

*Duration: 3m49s*

*In: "This week I'm going to have a look..."*

*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

The next event on the WICEN calendar is the NSW Pickleball Open at Wahroonga in northern Sydney, from the 14<sup>th</sup> to the 16<sup>th</sup> this month. WICEN is looking for operators for any or all days of the event.

Dementia Australia's next Memory Walk is 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.

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

Today's WICEN meetup here at VK2WI Dural, included a training session on setting up and troubleshooting the portable DMR repeaters. An extra meetup is planned for the 16<sup>th</sup> of April, dedicated to learning about VRA 62, the WICEN tactical communications vehicle. Regular WICEN meetups are on the first Sunday of every month; the next is on the 7<sup>th</sup> of May.

WICEN's voice nets are at 6pm and 6:30pm each 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 Kurrajong 70cm FM repeater, 439.825MHz with a 91.5Hz tone, with net controller VK2WIB; and the 6.30pm net will be on DMR Talk Group 3810, with net controller VK2WID.

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

[Memory Walks: <https://www.memorywalk.com.au/find-an-event>]

[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. At yesterday's Monthly General meeting, David VK2AYD presented part 2 of the Bletchley Park story to a very attentive audience.

The next Club's Coffee Morning is at 10am on Thursday the 13<sup>th</sup> of April at Brooklyn's Burger Bar, Thrumster.

The Telegraph Point VK2RCN repeater site is nearly complete. The APRS digipeater, and the 6-metre repeater will be installed once some technical issues with the equipment, are rectified. Other services are installed, and operating well.

The Club ran a successful Foundation training and assessment course this weekend. Courses are run once sufficient candidates have registered; so, if you are interested, contact the club via the contact form on the website, or write to PO Box 712 Port Macquarie NSW 2444.

Its now only two months 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.

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 newly published 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.*

## Hunter Radio Group

It is with regret, that the group advises the passing of George Hird, VK2BCY, of Speers Point, Lake Macquarie.

George was previously Supervising Technician of N.B.N. Television Station at Mt. Sugarloaf, west of Newcastle.

He was responsible for the building of the VHF Repeaters for the Hunter Radio Group.

Please pause with us now, while we remember George.

[pause 5 seconds]

Vale [va-LAY] George Hird VK2BCY.

*Advised by Rodney VK2CN  
For the Hunter Radio Group*

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## Blue Mountains Amateur Radio Club

Friday night saw the Club's April meeting, moved forward a week to avoid clashing with Good Friday. Attendees enjoyed Hot Cross Buns while learning about "Near Vertical Incidence Skywave".

Yesterday saw a working bee at the Club rooms.  
The club wishes all listeners a happy and safe Easter.

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; the next course is scheduled for the weekend of the 15<sup>th</sup> and 16<sup>th</sup> of April. Licence upgrade training is held on Wednesday evenings at Glenbrook, with online options available; Standard and Advanced Exams are also available, on the second day of foundation weekends.

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) to register, or for more information.

More information about the club can be found on the website, at [www.bmarc.org](http://www.bmarc.org).

*Advised by Steven VK2TSG  
President, Blue Mountains 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.*

## St George Amateur Radio Society

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

In preparation for the contest; at the society's next gathering this coming Wednesday the 5<sup>th</sup> of April, Col VK2BCC will be giving a presentation on Morse Code.

This presentation includes; the history of Samuel Morse's original code of the 1830's, the world-wide pre-telephone telegraph network, with a focus on Australia's Overland Telegraph Line and the East West line across the Nullabor; Marine Radio, from before the Titanic until it's closure in 1999;

Morse in wartime, and in many other services, including of course Amateur Radio; and, finally, the learning process based on the original manual of the Marconi School of Wireless here in Sydney.

Col will finish with a review of how Amateur Radio Morse contacts should be managed – including how they should be started and finished, with common abbreviations.

After this presentation, there will be an opportunity for those attending to peruse the disposals tables for a bargain and enjoy tea, coffee, biscuits, and cake while catching up with friends.

The gathering will be at the Society's meeting rooms; Donnelly Park, Kyle Parade Connells Point - near South Hurstville. Doors open at 7:15pm for a 7:30pm start.

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 night saw over thirty attendees as the club's monthly meeting. The Committee decided it would be fun to compare modern and historical radio in the same evening.

First off, Members were asked to bring 2 Morse keys that had not been used for a while or needed a bit of attention. The resulting display of Morse Keys spanned from 1930 to the 2000's; including Military, Bakelite, super fancy Kent keys, as well as two Vibroplex keys. Members were challenged to key their name in morse code and feel the different key weights.

Moving from historical to modern day digital communications; Rob VK2DIO, gave a presentation on DMR. Firstly, he explained how it works; voice is converted to data via a CODEC, which is sent via a MODEM over the air via the transmitter. Then, the practical details of getting on air; once you have a DMR radio, before you can use it on air you need to register for a DMR ID. As Rob explained, the process is pretty easy and free of charge.

Then you need to program the radio, which is most easily done by loading in a configuration file, known as a Codeplug. It saves a lot of hassle and potential problems, if you can copy a Codeplug from someone who has already set it up for a radio like yours.

There were lots of questions and interest in this topic; more details can be found on the Club's website, at [hadarc.org.au](http://hadarc.org.au).

Finally, Members agreed to a set of Values HADARC want to be known for. In 1928, amateur operator Paul Segal penned a set of values that ARRL still uses today. HADARC discussed in plain language, how we as a Club want to operate. The Six Values include: Being Considerate, Loyal, Progressive, Friendly, Balanced and finally, of Service to the community. Please expect these Values when you attend events and engage with people at HADARC.

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;*

**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;***

**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.