

## **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

Today saw another “Members Morning Meetup” here at VK2WI Dural. The morning includes Trash and Treasure, boot sales and disposals tables available; and light refreshments.

Then in the afternoon, there was meeting of those members interested in the Radio Experimenter’s Group. We will have a full report, in next week’s news.

And, if you aren’t travelling for the King’s birthday long weekend, don’t forget the ARNSW 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 19<sup>th</sup> to the 25<sup>th</sup> of May;.  
First, the summary of activity;

Dates across the columns are	19 <sup>th</sup>	20 <sup>th</sup>	21 <sup>st</sup>	22 <sup>nd</sup>	23 <sup>rd</sup>	24 <sup>th</sup>	25 <sup>th</sup>
10cm Flux	165	170	163	162	155	164	152
Fredericksburg A-Index	10	26	19	17	11	10	11
Australian A-Index	5	16	13	14	7	8	7 estimated
T index	88	112	97	102	92	96	91

Solar activity reached R2 level on the 19<sup>th</sup>, with four M-class flares; and R2 again, on the 20<sup>th</sup> with seven M-class flares; the largest, M8.9 at 1235UTC. The 21<sup>st</sup> was also at R2 with 3 M-class flares; the 22<sup>nd</sup> and 23<sup>rd</sup> reached R1 with a single M-class flare; the 24<sup>th</sup> with two M-class flares, and the 25<sup>th</sup> with one.

Geomagnetic activity reached G2 levels on the 20<sup>th</sup>, and G1 on the 21<sup>st</sup>; but was otherwise low to moderate, remaining below warning threshold.

F2 critical frequencies in Southern Australia remained mostly near predicted monthly values, with enhancement of 15% observed during local day and 30% during local night on the 20<sup>th</sup>.

The forecast, issued on the 26<sup>th</sup> of May, through until the 1<sup>st</sup> of June;

Solar activity is expected to be at R0 to R1 levels; with isolated R2 periods throughout the week. Geomagnetic conditions should be quiet.

Maximum usable frequencies in the Southern Australian are expected to be near predicted monthly values, with enhancements up to 20% possible, 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 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>.

Nearing the end of May, we are expecting a;

Minimum of 134, Average of 149, and a Maximum of 180  
With peak dates from the 3<sup>rd</sup> to the 12<sup>th</sup>, and the 20<sup>th</sup> to the 29<sup>th</sup>.

And looking ahead to June, we are expecting a;

Minimum of 135, Average of 155, and a Maximum of 165  
With peak dates from the 6<sup>th</sup> to the 8<sup>th</sup>; and the 16<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-FOAR089.wav]**

*Duration: 4m32s*

*In: "Recently I was told ..."*

*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]

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

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### [Play File: 17-E-WNS0528.wav]

*Duration: 2m09s*

*In: "Here at Dural ..."*

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

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#### [Transcript]

*Here at Dural next Sunday morning WICEN will have its regular monthly meetup, where Simon VK2TW will give a presentation on the Public Safety Network and VRA Field radios, both of which were used at the recent land search activation on the Central Tablelands. The presentation starts at 9.30am.*

*On 16-18 June, WICEN will provide safety communications for the Glow Worm Tunnel Marathon in the scenic Blue Mountains. This is a great opportunity to go bush without straying too far from home.*

*On 15-16 July, NSW State Emergency Services have their Bush Search and Rescue "NavShield" event, at a location several hours drive from Sydney. Six WICEN operators will be providing safety communications for this bush navigation event.*

*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 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) – 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> ]

## Club News

We start this week from the Oxley Region Amateur Radio Club; and their next meeting is coming up at 2pm on Saturday the 3<sup>rd</sup> of June, in the SES Building in Port Macquarie. As the Club's Annual Field Day is on the following weekend, the meeting will be devoted to planning for the Field Day... which is now, only two weeks away.

On Saturday and Sunday, the 10<sup>th</sup> and 11<sup>th</sup> of June, the Club' annual 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. Accommodation should be booked soon, as the area is a popular tourist destination for the June long weekend.

The new 2 metre repeater for VK2RCN on 147.0MHz, has been installed. It has internet connectivity in readiness for linking to the club's VK2RPM 146.7 MHz 2 metre FM voice repeater. And in a change to the 6 metre VK2RCN repeater on 53.8MHz; due to a weak drifting signal intermittently keying the repeater, a 91.5 Hz CTCSS subaudible tone is now required for access. A 91.5 Hz tone is also transmitted.

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.*

## **Illawarra Amateur Radio Society**

The next meeting of the Society is on Tuesday the 13<sup>th</sup> of June. The general meeting starts at 7:30pm, directly following the Society's Committee Meeting at 6:30pm. Attendees are most welcome to arrive from 6.30 onwards to enjoy a pre-meeting chat and cuppa in the foyer.

Meetings are at the BlueScope Steel Visitors Centre, on the southern side of the Wollongong CBD. After turning off Springhill Road into the BlueScope main entrance road, attendees then turn immediately right before the security gates, following the large signs towards the Visitors Centre.

At the June meeting, IARS Member Keith VK2KQB will be presenting and demonstrating the use of spectrum analysers, low-cost signal generators and oscilloscopes for the testing of filters and other radio items. He plans to show how to tune cavities, filters and even simple coaxial stub filters to demonstrate the success that can be found in using everyday low-cost equipment.

After Keith's presentation, there will be the usual fantastic supper to conclude the night, along with the opportunity to have a great chin wag with your old and new mates. And not forgetting the disposals table where an excellent bargain can be had for that item you didn't know you even needed.

The Society now has three weekly Nets. The Saturday morning net starts at 9:30am, run by Steve VK2BGL. This Net often has check-ins from all over Australia and the world and is usually an open topic forum. You can join via the 2 metre repeaters, VK2RMP on 6850 or VK2RUW on 6675, or from out of town via EchoLink, VK2BGL-R.

The Thursday afternoon net starts at noon, run by Chris VK2CY. This Net is made up of many retired Marine Radio Operators and Radio Inspectors, but everyone is welcome. As you can imagine their topics of discussion can be far reaching, informative and enlightening. The Net is also on the 2 metre repeaters 6850 and 6675, while out-of-towners can check-in on Echolink via VK2MT-R.

The third weekly Net is on 80 metres on Tuesday evenings, except for meeting nights, at 8:30pm; this Net is a get together of Society members having a casual chin-wag. The usual frequency is 3666kHz, plus or minus for other usage.



You can find out more about the Illawarra Amateur Radio Society, including details on Amateur Radio training and examination activities, on the web at [iars.org.au](http://iars.org.au), and the society is also on Facebook. The website again; [iars.org.au](http://iars.org.au).

To conclude, all listeners are invited to attend the next meeting of the Illawarra Amateur Radio Society, at 7.30pm on Tuesday the 13<sup>th</sup> of June, at the BlueScope Steel Visitor Centre, just south of Wollongong city.

*Rob VK2MT*

*President of the Illawarra Amateur Radio Society.*

## Westlakes Amateur Radio Club

The next car boot sale is on Saturday the 15<sup>th</sup> of July. Its in the Club grounds, 6a York Street Teralba, starting at 8am.

You can set up a stall at no charge; but bring your own table. There will also be a BBQ and hot and cold drinks available.

All are welcome.

Westlakes has several on air nets each week, details are a little later on in this bulletin.

*Advised by Barrie VK2QG  
For the Westlakes Amateur Radio Club*

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## Central Coast Amateur Radio Club

The Kariong clubrooms are open on Saturdays from 10:30am; As always, members and visitors are most welcome. Yesterday was the club's monthly Show & Tell – we will have more details in next week's update.

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.*

## St George Amateur Radio Society

From all reports, the Don Edwards memorial slow Morse contest went very well this year - logs received so far indicate at least 30 operators participated. If you haven't already sent in your contest log, there is still time. Send your log along with a photo of your key, to [contest@sgars.org](mailto:contest@sgars.org).

The Society's next gathering is coming up on Wednesday the 7<sup>th</sup> of June.

Digital Mobile Radio (DMR) network has been active in Australia for a number of years now, providing local, national and international voice communications. The VK DMR network now includes over 50 DMR repeaters in most Australian states, over 800 VK registered DMR users, with nearly 300 registered hotspots.

Tony VK2ALE, will share his experience on getting started with DMR including equipment selection, registration, and radio configuration aka code plug, how to utilise connections both locally and internationally, and between various DMR networks.

Come along to hear Tony's informative presentation at the June SGARS information gathering to be held in the scout hall, Donnelly Park, Kyle Parade, Connells Point near South Hurstville. Doors open at 7.15 pm. Meet up with fellow amateur radio operators, browse the disposal and enjoy a warm cuppa. Members and visitors are most welcome.

A reminder about a change coming soon to the Society's VK2RDX 2 metre repeater at Mt. Bindo in the Western Blue Mountains, which has been in service 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.*

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

The next Meeting of the Club will be this Wednesday the 31<sup>st</sup> of May, in Block M at the Campbelltown School of Performing Arts, Beverley Rd. Campbelltown, commencing at 7:30pm. Visitors wishing to learn more about Amateur Radio are most welcome to attend.

The Club's weekly net on Thursday evenings starts at 7:30pm on the Club's repeater, VK2RFG, on 438.65MHz. Anyone is welcome to check-in. The repeater has a negative 7MHz input and a 91.5Hz CTCSS tone is required for access – its also available via EchoLink.

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

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

## **Hornsby and Districts Amateur Radio Club**

The last Monthly meeting of HADARC, opened with the raw sound of an electric guitar solo. People looked around wondering if they had joined the right club or not.. but then there was a video examining valve amplifiers and how a valve works in practice. Under a high magnification microscope, a tube was slowly pulled apart from the glass, then the screens and grids all the way to each physical element that constructs a tube. We looked at how the air is removed from the envelope by the process of burning barium on the getter cups. All in all, it was really interesting and one Club Member Jill, said she had tried to build her own Tube diode. That indeed is impressive.

We then moved the to the AGM. Matthew VK2BAI stepped down as current President to make way for new ideas in the Club. Chris VK2YMW was elected as HADARC's new President with Rod VK2DIO as Vice President. All Committee roles were filled including Rod VK2DAY, Steve VK2KHA, Andrew VK2TAN and Steve VK2AAV.

The back table had such good bargains, some 50 kits of battery new connectors disappeared into members hands like magic. It was a fun night and HADARC also signed up a new member.

Please join the Club at the next mid-monthly meeting, in 2 weeks at the Hornsby Rifle Club, with the popular experimenters evening.

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, who has been doing, a little writing;

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### [Play File: 19-E-MRS0528-ID4.wav]

*Duration: 2m17s*

*In: "If you check out..."*

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

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*[Transcript]*

*If you check out the current edition of Amateur Radio magazine, you'll find two articles by me.*

*"Surfing the Airwaves since 1923" is about the Society celebrating 100 years since the formation of the original Manly & District Radio Club in 1923. How old is your club?*

*The other is a review of a book by Volodymyr Gurtovy US7IGN. In "War Diaries: A Radio Amateur in Kyiv", Wlad tells of his experiences as an Amateur during the first six months of the Russian invasion of Ukraine. I think it's well worth a look.*

*This Wednesday, the 31st, is the fifth Wednesday of the month, which means another Show and Tell night! This time, the theme is Batteries and Battery-operated Equipment. If you have any noteworthy specimens of either, bring them 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!*

*Video of the last club Show and Tell night, featuring Dick Smith VK2DIK and Dave Jones of EEVblog, is now up on the club YouTube channel VK2MB-TV. Just go to YouTube and search for the club callsign, VK2MB. You'll also find club lectures there, and videos on many other Amateur Radio topics.*

*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.