

## **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.

# Weekly Solar and Geophysical Report

For the period of 30<sup>th</sup> of June to the 6<sup>th</sup> of July.

First, the summary of activity;

Dates across the columns are	30 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>
10cm Flux	159	166	170	173	167	154	158
Fredericksburg A-Index	8	6	8	7	5	9	11
Australian A-Index	7	1	3	1	1	3	7 estimated
T index	92	91	92	87	96	81	88

Solar activity was at R1 level on the 1<sup>st</sup> of July, with one M-class flare, before reaching R3 level on the 2<sup>nd</sup>, with an M2.0 and an X1.0 flare at 2314UTC. Solar conditions remained at R1 from the 3<sup>rd</sup> through until the 6<sup>th</sup>, with one M-class flare and several smaller flares, each day.

Geomagnetic activity was low to moderate all week, remaining below warning threshold.

F2 critical frequencies in Southern Australia remained mostly near predicted monthly values, with enhancement of 15% observed during local night on the 2<sup>nd</sup>.

The forecast, issued on the 7<sup>th</sup> of July, through until the 13<sup>th</sup>;

Solar activity is expected to be at R0 to R1 levels.

Geomagnetic activity is expected to reach G1 on the 7<sup>th</sup>, with a chance of isolated G2 periods due to the arrival of a CME first observed on the 4<sup>th</sup>.

G0 geomagnetic conditions are expected for the rest of the week.

Maximum usable frequencies should be mostly near predicted monthly values. Isolated Shortwave fadeouts are possible.

*Data courtesy of the Australian Space Weather Forecasting Centre.*

# Space Weather Summary for June 2023

*Compiled with data from the Australian Space Weather Forecasting Centre*

Solar activity was predominately at the R1 level during June 2023, with a single R3 event on 20<sup>th</sup>, and no R2 level flares observed during the month. In total, 22 M-class flares and one X-class flare were observed. The largest flare was an X1.1 (R3) flare at 1709UTC, on the 20<sup>th</sup>.

The proton flux remained at background levels throughout June, with no enhancements over the 10 MeV threshold.

The strongest geomagnetic disturbance for June was observed on the 16<sup>th</sup>, with a local A-index of 18. An isolated period of G2 geomagnetic conditions was observed at Hobart on this day. Overall, Australian region geomagnetic conditions remained below warning threshold. Planetary geomagnetic conditions reached G2 late on the 15<sup>th</sup> and into the 16<sup>th</sup> due to the combined effects of a coronal hole high speed wind stream and a corotating interactive region. A weak shock in the solar wind was observed at 1916UTC on the 24<sup>th</sup>, possible due to a glancing CME impact associated with the X1.1 flare on the 20<sup>th</sup>.

No significant ionospheric depressions were observed during the Month. Maximum usable frequencies were generally near predicted monthly values for June, with occasional enhancements of 15% observed. Mild depressions of 15% were briefly observed in Northern Australia on the 7<sup>th</sup>, and in Southern Australia on the 30<sup>th</sup>.

Spread F was frequently observed during local night hours in southern Australian regions. No significant shortwave fadeouts impacting the Australian region were observed during the month. The X1.1 flare on the 20<sup>th</sup> occurred during local night hours, thus not impacting local HF conditions. No significant ionospheric scintillation was observed during the month.

Australian T-index average for the month was 98.

## 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-FOAR049.wav]**

*Duration: 3m20s*

*In: "Today we enjoy..."*

*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-WNS0709.wav]

*Duration: 1m39s*

*In: " WICEN NSW ..."*

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

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#### [Transcript]

*Next weekend, WICEN will be active in the Upper Hunter region, providing comms support for the New South Wales SES "NavShield".*

*The next WICEN monthly meetup is on 6 August, with another communications exercise being planned.*

*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 HF net will be at the earlier time of 5.30pm, on or near 7110kHz LSB. Net controller VK2WIZ will announce the call-in sequence and other information. The 6pm net will be on the Kurrajong 70cm FM repeater, 439.825MHz and a 91.5Hz tone, with net controller VK2WIB.*

*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; and their July Coffee Morning is coming up at 10am this Thursday the 13<sup>th</sup> of July, at Brooklyn's Burger Bar, Thrumster.

The new VK2RPM RadNet DMR repeater will soon be installed at Middle Brother Mountain. This will be done in conjunction with implementation of linking between the VK2RPM 2 metre repeater on 146.7MHz, and the VK2RCN 2 metre repeater at Telegraph Point, on 147.0MHz.

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; and on Facebook, just search for Oxley Region Amateur Radio Club.

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

## **Westlakes Amateur Radio Club**

The next car boot sale is on Saturday the 15<sup>th</sup> of July. Its at 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*

## **Illawarra Amateur Radio Society**

The next meeting of the Society is on this coming Tuesday the 11<sup>th</sup> of July. 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.

Tuesday night's meeting will be a "Show and Tell" night; attendees are invited to bring along something they have built, modified or are just plain proud of, to show to everyone. The bonus for the night is that the best presentation, as voted by those attending, will be awarded a prize of a very handy Nano VNA. So, what better way to add to your collection of necessary equipment, without needing to explain "how much did that cost?", is to come along and show-off your favourite piece of equipment to your radio buddies.

Don't forget the Disposals Table at the meeting, where you will probably find an excellent bargain for that item you didn't know you even needed.

Also, there will be final planning and discussion on the Society's 75<sup>th</sup> Anniversary Field Day weekend on the 15th and 16th July. While at the Southern Highlands site, the Society will also be participating in the Trans-Tasman Contest on the Saturday night; Keep an ear out for VK2AMW.

The Society 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, 7.30pm this coming Tuesday the 11<sup>th</sup> of July, at the BlueScope Steel Visitor Centre, just south of Wollongong city.

*Rob VK2MT*

*President of the Illawarra Amateur Radio Society.*

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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. At the next open day on the 15<sup>th</sup>, the plan is to finish up tweaking the triband beam at the clubrooms. To facilitate planning, please email the executive if you are available for this activity.

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

Entries for the April to June period of the Ted Powell Memorial DX Challenge are now open until the 14<sup>th</sup> of July. If you have worked any DX over the past 3 months, head over to [contest.fgarc.org.au](http://contest.fgarc.org.au) and submit an entry. There are several easy ways to enter; see the website for more details, [contest.fgarc.org.au](http://contest.fgarc.org.au).

The next Amateur Radio Repeater Group foxhunt is in the Macarthur area, on Sunday the 23<sup>rd</sup> of July. The location will be somewhere in the vicinity of the Hume Hwy corridor, between Casula and Narellan Rd. There will be 4 foxes transmitting on different frequencies for 30 seconds on with 60 seconds off between transmissions. Coordination will be on the VK2RFG repeater, starting at 9am. See the website, [arrg.club](http://arrg.club) for details.

The July Monthly General Meeting of the Fisher's Ghost Amateur Radio Club is on 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

Yesterday, four members of the Society braved near freezing temperatures, near gale-force winds and rain, at the Mt. Bindo repeater site in the Western Blue Mountains. Nevertheless, they managed to replace the VK2RDX repeater's damaged 2 metre antenna. The planned implementation of a 91.5Hz tone on the repeater, has been postponed until later in the year.

All four members returned home, tired but safe after a long drive.

This news bulletin is being relayed through VK2RDX and signal reports would be gratefully received. The repeater is on 146.650 MHz with a 600kHz negative offset.

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**

This coming Tuesday the 11<sup>th</sup> of July, the Club's Mid-Monthly meeting will be at Magpies in Waitara. The evening will be a chance to catch up with fellow amateurs and share some of those tall and not so tall radio stories.

It seems there are more & more ways to find information on nearly any topic; and, Amateur Radio is no exception. It was interesting to see Audible lists an audiobook, called "a No-Fluff Beginner's Guide to Setting Up and Using Your Ham Radio".

It says; "Ham radio is a fun hobby that allows you to talk to other ham radio operators locally and around the world. Depending on your license class, ham radio is used for a wide variety of activities. It is also useful in emergencies and search and rescue operations in disaster situations where all communication networks are down. The beauty of ham radio is that it is independent of any resources, whether grid or Internet for operation."

So, if you have a friend interested in radio, this audio Book may be a good introduction.

The club looks forward to seeing you at HADARC's Tuesday mid-monthly meeting and dinner, at Magpies Waitara.

73 for now,

*Matt VK2BAI*

*For the Hornsby and Districts Amateur Radio Club.*

## [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-MRS0709-ID4.wav]

*Duration: 1m39s*

*In: "Last month's lecture..."*

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

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*[Transcript]*

*Last month's lecture is now up on YouTube. The topic was the Global Maritime Distress and Safety System Annual Safety Radio Survey. You'll find it on the Society channel VK2MB-TV, or click the link in the text edition of this week's news.*

*Next weekend is the Trans-Tasman Low-Band Contest. The Club station will be active on 160, 80, and 40 metres from the QTH of club member Patrick VK2PN, up the coast at Black Head. Modes will be both sideband and CW. Listen out for the Centenary Special Event Callsign, VI100MB. Hope to catch you on the air!*

*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.