

## **In the news from Amateur Radio New South Wales for this week;**

As always, you can direct any general enquires to the ARNSW office via email, to [office@arnsw.org.au](mailto:office@arnsw.org.au), or by leaving a phone message on 02 9651 1490.

Later in this bulletin, we have a summary of on-air activities from both Sydney, and across New South Wales. We would welcome any updates from club and groups; simply email [news@arnsw.org.au](mailto:news@arnsw.org.au) – we don't need full items, just the details of the activity and contacts. Don't forget, we always welcome reports on the outcome of recent activities, as well.

Tonight, we again 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.

VK2WI news bulletins are streamed live from our website, [arnsw.org.au/audio](http://arnsw.org.au/audio), and recordings of previous bulletins are also available.

# Weekly Solar and Geophysical Report

For the period of the 5<sup>th</sup> to the 11<sup>th</sup> of August;  
This report issued on the 12<sup>th</sup> of August.  
First, the summary;

Dates across the columns are	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>
10cm Flux	114	116	116	113	109	108	115
Fredericksburg Index (Afr)	7	5	20	21	15	10	12 observed
Australian Index (Aaus)	3	0	13	15	14	11	15 estimated
T index	47	47	54	64	58	51	53

Solar flare activity was low to moderate all week, with some isolated C-class flares; no warnings were issued.

Geomagnetic activity was mostly quiet with some unsettled periods, with a G1 level warning on the 11<sup>th</sup> for minor storm conditions.

F2 critical frequencies in Southern Australia remained mostly near predicted monthly values.

The forecast for the 12<sup>th</sup> to the 18<sup>th</sup> of August;

Solar activity is expected to be low. Geomagnetic conditions may reach G1 warning levels on the 12<sup>th</sup>, 17<sup>th</sup>, and 18<sup>th</sup>, with quiet conditions expected otherwise.

Maximum Usable Frequencies are likely to be depressed after local dawn on the 17<sup>th</sup>. Further degradations are possible on the 12<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup>; but frequencies near predicted monthly values, are expected at other times.

*Data courtesy of Space Weather Services.*

## Solar Flux Index update

Here are the updated Solar Flux Index (SFI) figures for this week.

Having finished July, we had a;

Minimum of 92, Average of 126 and a Maximum of 176  
With peak dates from the 9<sup>th</sup> to the 21<sup>st</sup>

So far for August, we are expecting a;

Minimum of 94, Average of 106 and a Maximum of 116  
With peak dates from the 5<sup>th</sup> to the 20<sup>th</sup>

And looking ahead to September, we are expecting a;

Minimum of 98, Average of 107 and a Maximum of 116  
With peak dates from the 1<sup>st</sup> to the 13<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>]

# Space Weather Summary for July 2022

*Compiled with data courtesy of Space Weather Services*

Solar activity was mostly at low levels through the month, reaching R1 warning levels on the 8<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, 14<sup>th</sup>, and 16<sup>th</sup>. The largest flare for the month was M2.9 – R1 warning level – on the 14<sup>th</sup>. A total of 7 M class flares and no X class flares were observed.

Some minor proton flux enhancements were observed on the 11<sup>th</sup>, but these were below solar alert threshold. Some small coronal mass ejections were observed in association with this month's flares, but the majority were not earth-directed. A CME associated with a solar filament eruption on the 15<sup>th</sup> briefly elevated solar wind parameters observed on the 19<sup>th</sup>.

Geomagnetic activity in the Australian region for July was generally at quiet levels, with only some isolated minor disturbances. A single period of minor storm activity – at G1 alert level – was observed on the 21<sup>st</sup>, with the Australian region A index reaching 13 for a brief period. This activity is attributed to the combined effects of a CME and already elevated solar wind speeds due to a coronal hole.

Global geomagnetic data shows the largest disturbance globally on the 19<sup>th</sup>, with a planetary Ap index of 26. This activity was due to a combination of a CME on top of already elevated solar wind stream action.

No significant ionospheric depressions were observed across the Australian region in July. The largest Southern Australia ionospheric depression was on the 8<sup>th</sup>, with up to 35% reduction in MUF.

Spread-F was frequently observed during local night hours in both northern and southern Australian regions during the month. Sporadic-E was observed at some sites, particularly for the first half of the month during the local day. No significant shortwave fadeouts were observed during the month.

## What use is an F-call?

Tonight, we continue with this series, written and produced by Onno VK6FLAB. Each episode looks at different aspects of the diverse hobby of Amateur Radio.

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### **[Play File: 15-FCAL046.wav]**

*Duration 1m25s*

*In: "What use is an F-call?"*

*Out: "I'm Onno VK6FLAB"*

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For more information about this series, including transcripts and useful resources for F-calls, Onno's website is; [vk6flab.com](http://vk6flab.com), or follow him on Twitter, @VK6FLAB.

## WICEN News

This year's WICEN NSW AGM, is on Saturday 3<sup>rd</sup> September at 2pm, in the Centenary Building here at VK2WI Dural.

WICEN NSW is providing safety communications for the Hawkesbury Canoe Classic, on the weekend of the 29<sup>th</sup> and 30<sup>th</sup> of October. Competitors paddle 111km overnight, along the Hawkesbury River from Windsor to Mooney Mooney. Please email [mark.cheeseman@vrarescue.org](mailto:mark.cheeseman@vrarescue.org) if you would like to help out.

WICEN NSW voice nets are on Sunday evenings, starting at 6pm, on either the Chatswood 2 metre repeater, or the Kurrajong 70cm repeater. Please check the website for details. WICEN NSW, is a communications support squad of VRA Rescue NSW. For more information on upcoming events, or how to join, visit the website at [nsw.wicen.org.au](http://nsw.wicen.org.au). They are on twitter @wicennsw, and on Facebook.

For information about other WICEN groups; WICEN ACT is part of the Canberra Region Amateur Radio Club. Their website includes WICEN and general Club information and can be found at [www.crarc.org.au](http://www.crarc.org.au). WICEN Victoria has a weekly net on Tuesday at 8:30pm, on 3.6MHz. More details on the web at [vic.wicen.org.au](http://vic.wicen.org.au).

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## **ARRL DX news**

TANZANIA; Eugen, DL8AAI will be active as 5H2JK/p during a hiking tour in Kilimanjaro National Park (5HFF-0005) until August 17, and some days after hiking, from Moshi. Activity will be holiday style, mainly on SSB on 20 to 10 metres. Check for WSPR beacon signals from 5H2JK/P on 15 metres which will be activated when the antenna is operational.

MALAWI ; Junior, 7Q7JN has been active as 7Q7EMH from the radio station at the Embangweni Mission Hospital in the Northern Region. Activity has been on 30, 15 and 12 metres using CW and FT8.

INDONESIA; To celebrate the 77<sup>th</sup> anniversary of independence, amateurs will be using 8H7 and 8I7 call signs until August 21. Activity will be on 80, 40, 20, 15 and 10 metres and on 2m/70cm for Satellites, as well VHF Terrestrial on 2 metres, using CW, SSB, RTTY, FT8 and FM (Satellite).

MALDIVES; Giovanni, IZ2DPX will be active as 8Q7AG until August 20. Activity will be on various HF bands as well as 6 metres. Also, Stefan, EA5Q will be active as 8Q7QE from until August 24.

USA; Special event station N7C is commemorating the Navajo Code Talkers of World War II, until August 19. Look for them on 7265, 14265 and 18130 kHz using CW, FT8 or phone. QSL via Herb, N7HG; Herb's father, John V. Goodluck, was one of the US Marine Corps Navajo Code Talkers, serving in the South Pacific in WWII.

CUBA; Lefty, CO2QU will be active until December 31 on 30 metres (FT8/FT4) and 6 metres (FT8).

PAKISTAN; Members of the Pakistan Amateur Radio Society (PARS) will operate special call sign AP75PAK and Pakistani hams may use the "AP75" prefix with their existing call sign suffixes for the month of August to celebrate the 75th anniversary of Pakistan's Independence.

INDIA; Members of the West Bengal Radio Club, VU2WB, will activate the special call sign AT2AAM to commemorate the 75<sup>th</sup> anniversary of the Independence of India. Activity will be on various HF Bands.

MAYOTTE; Marek, F4VVJ will be active as FH4VVK from August 20 until April 2024. Operations will be on various HF bands and modes.

SAUDI ARABIA; Members of the Saudi Amateur Radio Society will be using the special call sign HZ1CPCF for the "Crown Prince Camel Festival" until September 4. Activity has been on 20, 17, 15 and 6 metres using CW, SSB and FT8/FT4.

GRENADA; Greg, N9GB will be active as J38GB until August 19. He expects to be using CW and SSB on 40 to 6 metres including the WARC bands.

ISLE OF MAN; Dale, EI7HDB will be active as MD/EI7HDB until August 19. Activity will be on various HF bands using CW, SSB and digital modes.

ALAND ISLAND; Operators Alex, UT5UY/OH5UY, Pasi, OH2MZB, Jouni, OH2JIU, Niko, OH5CZ, Toni, OH5CY, Jere, OH5ELX and Juha, OH5CW will be active as OH5CW from August 20 to 27. Activity will be on 160 to 2 metres with a focus on 6 metres and the WARC bands, using CW, SSB, RTTY and FT8.

SEYCHELLES; Operators EA3WL and EA3BT will be active as S79/EA3WL and S79/EA3BT until August 23. The operation will be in SAT mode only, on QO-100, RS-44 and others, in a holiday style DXpedition, using SSB, CW and FT8.

ST. KITTS; Jim, NT5V is active as V4/NT5V until August 18, on various HF bands using CW, SSB and FT8. In addition, Gary, G0FWX will be active as V47FWX from August 21 to 30. Activity will be holiday style on various HF bands using SSB only.

THIS WEEKEND ON THE RADIO. The QRP Fox Hunt, 144 MMonVHF/DUBUS 144-MHz Meteorscatter Sprint Contest, WAE DX Contest, SKCC Weekend Sprintathon, Kentucky State Parks on the Air, Maryland-DC QSO Party and the 50-MHz Fall Sprint will keep contesters busy this weekend.

The 4 States QRP Group Second Sunday Sprint is August 15, and the Worldwide Sideband Activity Contest is August 16.

## Club News

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

The next Friday Night get-together is at 7pm on the 19<sup>th</sup> of August, at the SES Building in Port Macquarie. It will be held in accordance with the club's COVID-19 Safety Plan. Members are reminded that subscriptions are now due.

The VK2RCN repeaters at Telegraph Point are currently off air following a lightning strike in March. The underground mains power cable to site was extensively damaged, and work to restore mains supply to site is still ongoing.

Candidates who would like to attend the next Foundation training and assessment weekend, or assessments for the Standard or Advanced licence, can contact the club at PO Box 712 Port Macquarie NSW 2444 or via the web site contact form.

There are two club nets each week; the mid-week net starts at 7:30pm on Thursday nights, and the weekend net starts at 9am Sunday mornings. Both nets are on the VK2RPM 2 metre repeater, 146.7MHz with a 91.5Hz sub-audible tone for access. Members and visitors are encouraged to participate in the club on air nets as often as possible. VK2RPM is also available via EchoLink.

For more information about the Oxley Region Amateur Radio Club, visit the website at [orarc.org](http://orarc.org). The site contains a wealth of Amateur Radio items in addition to the club information. The July 2022 web edition of the club's bimonthly newsletter "Oxtales" is now online, and past issues are on the website as well. July Oxtales includes a comprehensive report on the Club's Annual Field Day, which was held on the June Long Weekend. 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.*

## Sydney ATV Group

The Group's ATV repeater at Lawson in the Blue Mountains, transmits high-definition TV on 445.50MHz, with analogue and digital inputs on 23cm.

Reception is possible over the Sydney Metro area, or via the British Amateur TV Club streaming web site; on the site, select the VK2 callsign and if requested, the HTML5 option. You can also text to say that you're watching – just enter /nick, a space then your name, your following text will appear in the column above.

Regular nets are on Monday evenings starting at 7:30pm. We regularly have technical talks, show our latest projects, general interest videos and much more.

You can call in during the net on the Lawson repeater, 147.325 MHz with positive offset, with reports, questions or help with receiving Amateur Television. Why not join in and find out more about this fascinating and fast-growing aspect of digital amateur radio.

*Advised by John VK2ATU  
on behalf of the Sydney ATV Group.*

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## Central Coast Amateur Radio Club

The Clubrooms at Kariong are open every Saturday. Members are reminded that membership is now due.

The club's AGM was held Yesterday, with election of Club President, Nigel VK2NB; Vice-president, David VK2VGA; Secretary Brian VK2BDU, and Treasurer James VK2EG. The committee members are; Karen VK2AKB, Henrick VK2FTDR, Don VK2ZCZ, Brad VK2NMZ, Steve VK2SKC, Bob VK2AOR, Glenn VK2GEM and Alan VK2MG. The Club tanks the outgoing team, welcomes the new members, and thanks those continuing for keeping up the great work.

At VK2RAG, the D-Star, RadNet DMR and 2m EchoLink services are fully functional. Brand Meister DMR and 70cm EchoLink and IRLP are still on the sick list. The Somersby WebSDR, online at [websdr.ccarc.org.au](https://websdr.ccarc.org.au), is configured to listen on 6 metres, 2 metres, 70 centimetres and 23cm.

The Club's Morning Tea net continues at 10am daily, and after VK2WI News on Sunday mornings. The Club's weekly net is on Thursday night from 8pm; this week's net included a discussion about "*what do you enjoy most about Amateur Radio*"; with consensus around simply being able to communicate in so many different ways. Both club nets are on the VK2RAG 2m repeater – 146.725 MHz with 91.5Hz tone, and on the EchoLink HAM and CCARC conferences.

The fortnightly SSTV net is hosted by Adrian VK2ABS. It's usually 2-3 rounds on the Club's 2 Metre WICEN repeater; 147.125 MHz with 91.5Hz tone. Adrian has had a large amount of support from other members and would love to see you drop in on the next net, this Friday the 19<sup>th</sup> of August at 7:30pm. Both the SSTV and the Thursday Night Nets are video streamed live to the club's Facebook page. Recordings of past nets can be found there, in the "Videos" section.

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 page – 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 Club will be conducting a Foundation licence course and assessment weekend on the 24<sup>th</sup> and 25<sup>th</sup> of September, at Cataract Activity Centre, Baden Powell Drive, Appin. The course will be dependent on a minimum of 5 candidates.

Foundation training will be held on Saturday, and examinations for both Foundation and all other licence grades will be on Sunday.

Bookings are essential, and close on the 5<sup>th</sup> of September; to register, contact the Club's learning organiser, Frank Walker by email to [walker\\_frank@hotmail.com](mailto:walker_frank@hotmail.com).

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

The Club's weekly net on Thursday evenings starts at 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, and 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.*

## Waverley Amateur Radio Society

The next meeting is at 7:30pm this coming Wednesday, August 17<sup>th</sup>, both in-person at the Anzac Room of the Rose Bay RSL Club, and only. Details will be sent out to the member email list prior to the meeting, but the previous link should still be functional.

The new committee is still working hard to sort out the accommodation options, and there should be an update at the meeting.

Apart from the weekly nets on a Monday evening, the “project day” get-togethers are scheduled for the first Saturday of the month. This month’s had to be cancelled at the last minute, so they hope to resume shortly.

Other activities are continuing either in person or on Zoom; see the website for details.

The Wednesday lunchtime get togethers, from midday, are back on in the RSL bistro, with good rollups so far.

You can keep up to date with the Waverley Amateur Radio Society on the web, at [vk2bv.org](http://vk2bv.org). On the site you can also find out more about kits available, update your membership details, and use the contact form to get in touch for more information.

*73 from Eric VK2VE  
Broadcast Publicity Officer*

## Manly-Warringah Radio Society

With COVID is still at large in the community, the Society will be holding a regular on-air net on the 2m repeater, VK2RMB. This is mainly so that members who are unable to make it to the clubhouse can still keep in regular touch with other members. Of course, visitors are welcome to drop into the net as well! The net takes place on the first Wednesday of the month, until further notice. Details are on the club web site.

This Wednesday is lecture night at the Society, where Derry Thomas will speak about his involvement with a twice-yearly car rally that raises money for the Cancer Council. The important entry requirement, however, is that participating cars are worth less than \$1500.

[\[https://www.shitboxrally.com.au/\]](https://www.shitboxrally.com.au/)

Unfortunately, due to logistics issues, the Society will not be able to activate Barrenjoey Lighthouse for this year's International Lighthouse and Lightship Weekend, but looks forward to being back there for the next ILLW in 2023.

Finally, with Sydney University's annual Open Day on Saturday the 27<sup>th</sup> of August, the Society has been asked by the university's School of Electrical & Information Engineering to set up a demonstration emergency Amateur Radio Station. From a radio point of view the local environment is a challenging one, but VK2MB/portable will be on the HF and VHF bands from 9am to 3pm.

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. If you need directions, call in on the society's 2 metre repeater on 146.875, or check the web site for details; the address is [mwrs.org.au](http://mwrs.org.au).

73 and stay COVID-safe everyone!

*Richard VK2SKY  
MWRS Publicity Officer*

## Hornsby and Districts Amateur Radio Club

The Club's mid monthly "Balun Business" experimenters evening was a great success, with a display of Baluns ranging from WW2, to 5 kilowatt Baluns and many home-made units. We ran tests to see how they performed using a VNA as well as seeing how different baluns compared across the HF spectrum.

Rod VK2DIO caused a stir when he asked; "Are people with UNUN's allowed to attend a BALUN evening?" We all laughed; yes, UNUN owners were most welcome; we all agreed that both Baluns and UNUN's are a great part of the Amateurs radio kit.

At the next general meeting, 8pm on the 23<sup>rd</sup> of August, Steve VK2AAV will presenting "the Magic of MOSFETS" and how to tame these great devices. Also, the Club's committee have been planning the future direction of the Club, and will present this at the meeting. Radio has a strong future and interest levels in the community remain high.

HADARC welcomes you, as a member or visitor, to join us for another top evening for Radio Amateurs... and don't forget to keep Radio Active; join the Club's weekly nets; Monday on VK2RNS, Wednesdays on 80 metres and Moring Tea with HADARC every Friday on 40 metres. The VK2RNS 2-meter repeater now has added EchoLink capability; just look for VK2RNS-R.

*73, Matt VK2BAI  
HADARC President*

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## Activities on the air

### *Daily;*

The **CCARC Morning Tea net** is on at 10am, and after VK2WI News on Sundays. VK2RAG, 146.725MHz with 91.5Hz tone, also on EchoLink.

**Amateur Radio Central West Group** lunchtime net 1pm daily on VK2RCW.

### *Monday;*

**Westlakes ARC** nets 9:30am, now 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.

**Sydney ATV Group** net 7:30pm; call in on 2m repeater 147.325MHz.

**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. Activities online and on air; see website.

### *Tuesday;*

**Blue Mountains ARC** net from 8pm on 3543kHz.

**Illawarra ARS** 80m net at 8:30pm, 3666kHz.

### *Wednesday;*

**Westlakes ARC** net 9:30am on 7115kHz. 2 Metre nets, see website for details.

**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.

**Manly-Warringah Radio Society** from 8pm on VK2RMB, 146.875MHz.

***Thursday;***

**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.

**Central Coast ARC** net 8pm on VK2RAG.

***Friday;***

**Morning tea with HADARC** at 9am on 7106kHz.

**Westlakes** at 9:30am on 7115kHz.

**Amateur Radio Central West Group** at 8pm on VK2RCW.

The next **CCARC SSTV Net** is at 7:30pm on the 19<sup>th</sup> of August; 147.125MHz with 91.5Hz tone.

***Saturday;***

**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.

***Sunday;***

**Oxley Region ARC** from 9am, VK2RPM 146.7Mhz with 91.5Hz tone.