

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. We also welcome reports on recent activities.

General enquires can be directed to the ARNSW office via email, to office@arnsw.org.au, or by leaving a phone message on 02 9444 0123.

Yesterday was the 11th of March, and on that day 113 years ago, began organized Amateur Radio in Australia. It started in 1910 with a meeting of radio experimenters in Sydney, who were seeking a better deal from the authorities – from this meeting originated Amateur Radio New South Wales, effectively the oldest radio club in Australia and one of the oldest in the world; and in turn making the WIA, the world's oldest national Amateur Radio society.

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.

[Play File: 14-E-ID1.wav]

ARNSW Elections

The Annual General Meeting of Amateur Radio New South Wales is on Saturday the 22nd of April 2023. At this meeting, four directors will be standing down.

At the close of nominations yesterday, four nominations had been received and so there will be no ballot this year.

The nominations were from;

Mark Blackmore VK2XOF
Mathew Magee VK2YAP
Raymond Morris VK2ASE
Matthew Perkins VK2FLY

Peter VK2EMU
Returning Officer

Balun Buildathon

After a long absence, they are coming back – Sunday the 11th of June, here at VK2WI 63 Quarry Road Dural.

You'll have your choice of constructing a 1:1 or a 4:1 balun from a kit. You can also order high quality Kevlar antenna wire. All items must be pre-ordered and paid for on the day.

For enquiries or bookings, you can email balun@arnsw.org.au or leave a phone message with the office, on 02 9444 0123.

There will be more details in a future VK2WI News bulletin.

73 AI VK2OK

Function and Events Co-ordinator for AR New South Wales.

Weekly Solar and Geophysical Report

For the period of the 3 to the 9th of March.

First, the summary of activity;

Dates across the columns are	3 rd	4 th	5 th	6 th	7 th	8 th	9 th
10cm Flux	175	182	180	188	180	182	179
Fredericksburg A-Index (AFr)	16	10	17	11	7	6	13*
Australian Index (Aaus)	14	11	17	12	7	6	10 estimated
T index	101	110	112	98	123	128	138

Solar activity reached R3 on the 3rd, with an M3.3 flare at 1032UTC and an X2.1 t 1752UTC. Activity was at R2 levels on the 4th, with 3 M-class flares; on the 5th, with 4 M-class flares; and on the 6th with 3 M-class flares. The 7th saw no significant flares, but the 8th reached R1 with 2 M-class flares; and the 9th was R1 with an M1.4.

Geomagnetic activity was quiet to unsettled throughout the period, remaining below warning threshold.

F2 critical frequencies in Southern Australia were depressed 15% during local night on the 3rd, and 20% during the night on the 4th. The 5th saw variable conditions, ranging from 15% depressed up to 30% enhanced during the day, and 15% enhancement during local night. The 6th was depressed 25% during day, recovering at night to near predicted; the 7th was then enhanced 20% during local night; the 8th was enhanced 25 to 35% all day, and the 9th was enhanced 15% during local night.

The forecast, issued on the 10th of March, through until the 16th;

Solar activity is expected to be at R0 to R1 level, with a chance of R2 activity later in the week, with two active regions returning to the north-east solar limb. Geomagnetic conditions should mostly remain quiet, with a chance of G1 on the 14th and 15th. Maximum usable frequencies in the Australian region are expected to be briefly depressed after local dawn on the 14th and 15th; otherwise, enhancements of up to 20% are likely. Fadeouts are possible later in the week.

Data courtesy of the Australian Space Weather Forecasting Centre.

Space Weather Summary for February 2023

Compiled with data from the Australian Space Weather Forecasting Centre

Solar activity was generally at R1 levels this month, with some days at R2 and R3. A total of 49 M-class flares and 2 X-class flares were observed. The largest flare for the month was a long-duration X2.2 flare on the 17th of February. Originating from AR3229, this was the largest flare of solar cycle 25 so far, and also produced several fast partial-halo CMEs.

A mild proton enhancement (below S1 threshold) occurred on the 24th associated with a long-duration M3 flare. An S1 solar proton event was observed on the 25th following a long duration M6.7 flare from AR3229. A fast partial-halo CME was observed following the M3 flare on the 24th and a second fast CME was observed following the M6.7 flare.

The largest geomagnetic disturbance for the month was observed on the 27th with a peak local Australian A index of 47 and a corresponding planetary A index of 109; Australian region geomagnetic field had overall peak K index of 6 and a planetary K index of 7, corresponding to G3 conditions. This activity was associated with the combination of a large equatorial coronal hole high-speed wind stream, and CMEs observed on the 24th and 25th; both CMEs impacted Earth on the 27th. Auroral observations were reported in Tasmania, Victoria, the bottom of NSW, WA and SA on the night of the 27th.

Ionospheric conditions were generally good throughout the month. Mild depressions as a result of geomagnetic activity were observed on the 16th, 27th and 28th. Sporadic-E was frequent at most sites briefly during local dawn hours throughout February. Proton enhancements on the 25th and 26th contributed to increased absorption on Transpolar HF circuits.

The T-index fell to a minimum value of 69 on the 28th, following the geomagnetic activity induced by AR3229. Minor and major shortwave fadeouts were observed during the month in the Australian region associated with R1 and R2 solar flares. Aside from depressions induced by geomagnetic activity, maximum usable frequencies (MUFs) were generally enhanced by 20-30% in the Australian region during local day hours. The regional monthly T-index was predicted to be 75, but was recorded as 115 once the month finished.

Foundations of Amateur Radio

This series, written and produced by Onno VK6FLAB, continues a weekly examination, of the building blocks of Amateur Radio.

[Play File: 15-FOAR001.wav]

Duration: 1m24s

In: "Foundations of Amateur Radio ..."

Out: "I'm Onno VK6FLAB"

For more information about this series, including audio, transcripts and other useful amateur radio resources, Onno's website is; vk6flab.com; you can follow him on Twitter, @VK6FLAB; and you can contact Onno by email, to cq@vk6flab.com.

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WICEN News

Earlier today, WICEN provided safety comms today for Dementia Australia's "Memory Walk and Jog" in the Illawarra. There are three more Memory Walks this month: Canberra next Sunday, and events in Cronulla and the Hunter on the 26th. The Memory Walks last just a few hours, so they are ideal "starter events" for new WICEN members to get some experience.

In April, WICEN will be active in Penrose State Forest near Mittagong, supporting the Scouts NSW's "Dragon Skin" event.

If you would like to participate in any of these events, or just find out more, email wicen.ops@vrarescue.org.

WICEN's Weekly voice nets are at 6pm and 6:30pm on 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 HF, on or near 7110kHz LSB. Net controller VK2WIZ will announce the call-in sequence and other information.

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; providing practical training in tactical field communications, and to build other radio skills.

For more details of WICEN net schedules, and other information, check out the WICEN NSW web site, at 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 – 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. Over a dozen members enjoyed the Club's February Coffee Morning last Thursday at Thrumster.

Coming up at 7pm on Friday the 17th is the Club's Friday Night Get-together, at the SES building in Central Road, Port Macquarie. Following recent VKDMR network changes, Paul VK2ICQ will run a clinic to update code plugs for most of the common DMR radios.

Intensive working bees continue at the new VK2RCN site. The site is close to completion, all that remains is installation of the APRS digipeater, and the 6-metre FM repeater on 53.8MHz.

The next Foundation training and assessment weekend is on the 1st and 2nd of April, along with examinations for Standard or Advanced licences. To register, contact the club via the contact form on the website, or write to PO Box 712 Port Macquarie NSW 2444.

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. The site contains a wealth of Amateur Radio items in addition to club information. The March 2023 edition of the club's bimonthly newsletter "Oxtales" is in preparation, 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.*

Westlakes Amateur Radio Club

The club will be holding a Mini Field Day at club premises, 2E York Street Teralba, on Saturday the 18th of March.

Setup time for those taking part in the car boot sale is from 7am.

QSL Comms will also be in attendance on the day. There will be a modest raffle on the day with a Jaycar Voucher as first prize and second prize of a meat tray.

While on the topic of food, early arrivals can enjoy an egg and bacon roll for breakfast, with sausage sandwiches available closer to lunchtime.

Activities will conclude before 12pm, for those taking part in the John Moyle Field Day Contest time to be ready for the contest's commencement at noon. All are welcome.

A note about a change to the Westlakes DMR Net; the net is announced on Talkgroup 505 at 0828 each Sunday morning, and then usually starts on TG 3802 at 8:30.

You can find more information about the Club on the website at; westlakesarc.org.au, and there is a link from the Clubs page on the ARNSW website.

*Stephen VK2KWH
Secretary, Westlakes Amateur Radio Club.*

Illawarra Amateur Radio Society

The next meeting of the Society is on this coming Tuesday the 14th of March. 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's meeting will include an historical presentation by Barry VK2ADQ on the EME, or Moon Bounce, project that first operated from Dapto, south of Wollongong, later moving to Cataract, to the west. Several IARS members were involved, but none more so than Lyle VK2ALU, now Silent Key. Operating under the IARS callsign VK2AMW, this project made hundreds of contacts around the world and broke many records, originally on 433 and 1296 Megahertz, and later on 10 Gigahertz. Barry has unearthed lots of old photos and videos of the building, the large dish, and operating of the station, so his presentation will be very interesting and informative.

There will also be discussion and final planning for the Society's involvement in next weekend's John Moyle Field Day. Members will be setting-up on a property at Penrose, just south of Bundanoon, in the NSW Southern Highlands. They will be operating the Society's callsign VK2AMW and will be mainly using the HF bands for the weekend. The meeting will conclude with the usual excellent supper of coffee, tea, cake and biscuits.

The Society has two weekly Nets. The Saturday morning net starts at 9:30am, run by Steve VK2BGL; join in via the 2 metre repeaters, VK2RMP on 6850 or VK2RUW on 6675, or from out of town via EchoLink, VK2BGL-R. The second weekly Net is on 80 metres on Tuesday evenings, except for meeting nights, at 8:30pm; 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, and the society is also on Facebook. The website again; iars.org.au.

To conclude, all listeners are invited to attend the next meeting of the Illawarra Amateur Radio Society, at 7.30pm this coming Tuesday the 14th of March, at the BlueScope Steel Visitor Centre in Wollongong.

Rob VK2MT

President of the Illawarra Amateur Radio Society.

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Central Coast Amateur Radio Club

The Club's Kariong Clubrooms are open even Saturday from 10am. Next Saturday, there will be an antenna workshop to look at the tri-band beam. As always, members and visitors are most welcome.

Its running! If you want some more "Christmas Ham"... the event is now open, until midday on March 24. If you think you might be interested in either a Rigexpert AA-1500 Antenna Analyser, or a DX Commander Classic 80-10m Vertical Antenna kit; check the club's website and social media for details.

At VK2RAG Somersby, D-Star, RadNet DMR and 2m EchoLink services are fully functional. The Somersby WebSDR is online at 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 – 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.

Blue Mountains Amateur Radio Club

The Club's April meeting is being brought forward to avoid clashing with the Good Friday public holiday next month.

This meeting, will be held on Friday the 31st of March, at 7:30pm, at the usual venue of the Club Rooms, 4 Moore Street Glenbrook, in the Blue Mountains – doors open from 7pm.

Visitors and prospective new members are always welcome.

The Club will also be participating in the John Moyle Field Day on the 18th of March. They will operate into the evening, using several bands from the 'Bulls Camp Reserve' in the Blue Mountains. Listen for Club Callsign, VK2HZ.

There are 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 Club website for details.

The Clubs continues with both Foundation and Upgrade courses this year. The next Foundation course is is scheduled for the weekend of the 15th and 16th of April. Exams for other licence grades will also be available on the 16th. Courses and exam days do fill-up quickly, so please contact Club secretary, Irene VK2VAM, by email to; secretary@bmarc.org to register, or for more information.

More information about the club can be found on the website, at www.bmarc.org.

*Advised by Steven VK2TSG
President, Blue Mountains Amateur Radio Club.*

Manly-Warringah Radio Society

This coming Wednesday is lecture night at the Society, and the latest treat will be courtesy of Zara VK2ZYP, who will talk about the history of Sydney's Luna Park. Come along "just for fun" and find out the true story behind the manic smiling face that greets you as you enter the park!

Special Event Station VI100MB now in operation, celebrating 100 years since the formation of the original Manly & District Radio Club. The station should be active on club nights (Wednesdays), with the club's hard-core contesters and DXers, and other members, keeping the station active all year.

Next weekend, VI100MB should be active in the John Moyle Memorial Field Day. To find out more, check out VI100MB on QRZ dot com, and see the club web site and social media for operational updates.

Video from the recent centenary celebrations is being edited at the moment, and will soon be available on the club's YouTube channel, VK2MB-TV.

The Society is once again active on Facebook as "ManlyWarringahRadioSociety" (all one word), and on Twitter and YouTube, @VK2MB ["at V K 2 M B"]. Follow, like, subscribe, or whatever to keep up with the latest happenings at the club!

The Manly-Warringah Radio Society meets every Wednesday evening at the First Terrey Hills Guides Hall, 7 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, that's M-W-R-S dot O-R-G dot A-U.

*73 Richard VK2SKY
Publicity Officer, Manly-Warringah Radio Society.*

Waverley Amateur Radio Society

The next meeting is coming up at 7:30pm this Wednesday the 15th of March, in the ANZAC room of Rose Bay RSL Club, Vickery Avenue, Rose Bay.

Matt VK2FLY will be running a radio clinic, with some professional test equipment available. If you want to find out if that Baofeng is really as bad as everyone says, or you want to boast that your YAESU is the best thing since sliced bread, bring it along. In fact, bring along anything you can carry; we will test it, discuss it and hopefully we will all go away with some more knowledge about our equipment. There will also be equipment to test antennae as well as diplexers and duplexers.

Many members partake of dinner in the club's bistro prior to the meeting from about 6 pm and all are welcome; especially any visitors from other clubs or out of town.

Regular Monday evening nets are at 8pm on VK2RBV, 438.1125 MHz with a -5.4 MHz offset and 91.5Hz tone for access.

Wednesday lunchtime get togethers, are back on in the RSL bistro; these now adjourn after lunch to the ANZAC room where some practical activities are undertaken.

Other activities are continuing either in person and on Zoom. See the society's website for details.

The first Saturday of the month, is "project day", also in the ANZAC room of Rose Bay RSL Club. At the next one, on April the 1st, the topic is an intro to Digital Signal Processing including setting up the club's Raspberry Pi IoT boards to capture an incoming audio signal and converting to digital.

You can keep up to date with the Waverley Amateur Radio Society on the web, at 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*

St George Amateur Radio Society

The John Moyle Memorial Field Day Contest is on again this year, next weekend the 18th and 19th of March.

Members of the St. George Amateur Radio Society will activate the Club station VK2LE, on Saturday afternoon and evening, at a remote location at Oakdale (about 25km west of Camden). The plan is to operate in the 6-hour section, from about 2pm to 8pm.

Any members interested in taking part in the contest should contact Peter VK2EMU via email, to vk2emu@gmail.com.

Hornsby and Districts Amateur Radio Club

This coming Tuesday is the mid-monthly experimenter's meeting, and we will be looking at Apps and Software to support Amateur Radio.

We are sure that many club members will have tried loads of different software, so share your experiences – not just the good stories, but what to avoid as well. Maybe it's a weather App or a SDR App or perhaps a great piece of software for modelling electronics... HADARC wants to know all about it.

Bring your Phone, Laptop or computer to demonstrate what you like and what actually works well. We will trade ideas and see how to make sure we have the best tools to take back home and test in the shack.

And, stay tuned for the next Monthly meeting in April, where Rob VK2DIO will be taking us into the unexplored and exciting world of Digital Radio.

73 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.

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

The **CCARC Morning Tea net** on *weekdays* from 10am; VK2RAG, 146.725MHz with 91.5Hz tone, also on EchoLink.

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.

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 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.

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.

Hunter Radio Group net 7:30pm on 146.9MHz.

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;

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.

Westlakes Stone the Crows net; 6am on 3588kHz.

Sundays;

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

Westlakes DMR Net from 8:30am, usually on Talkgroup 3802; listen to Talkgroup 505 at 8:28am.

WICEN NSW nets from 6pm on Chatswood 2m or Kurrajong 70cm repeater; and from 6:30pm on DMR or HF. Check website for details.