Silent Key.

It is with regret that we begin this week, with news of a silent key.

The Oxley Region Amateur Radio Club have advised of the passing of their friend and fellow club member John Marriott VK2JB, formerly VK2CIF, on the 14th of March.

John originally came from Tenterfield but grew up in Sydney where he attended Asquith Boys' High School. John went on to attend the Technical College in Taree. Later in life he moved to North Haven where he worked in the fire protection industry before retiring. John didn't quite retire as he and his wife Rose ran a very popular fish and chip shop in North Haven for many years.

John joined the Oxley Region Amateur Radio Club in 2004 as an active member. He was a very keen home brewer, and his projects were always of a very high standard. Amongst his favourite projects were QRP HF SSB transceivers which he enjoyed building and operating. His impressive projects were always a drawcard at the Home Brew competition at the annual Oxley Region Amateur Radio Club Field Days.

A funeral service was held for John on the 22nd of March. The Amateur Radio service was represented at the funeral. John will be sadly missed and will always be remembered for his enthusiasm for Amateur Radio.

Please pause with us, while we remember John.

[pause 5 seconds]

Vale [va-LAY] John Marriott, VK2JB.

Advised by Henry VK2ZHE on behalf of the Oxley Region Amateur Radio Club.

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

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

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 <u>news@arnsw.org.au</u> – 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.

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

VK2WI news bulletins are streamed live from our website, <u>arnsw.org.au/audio</u>, and recordings of previous bulletins are also available.

Tonight, we 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.

A note for members of Amateur Radio NSW, planning to attend the 2024 AGM – Due to delays in receiving information from Australia Post for the ballot, the Board has decided to move this year's AGM back 2 weeks, to Saturday the 27th of April. This is to make sure that all documents can be process through the postal system in time, and avoiding further possible delays close to Easter.

Also, look out for the next issue of All Access in your email inbox, early this coming week.

HF Antenna Day – part two...

Continuing with our presentation program for 2024, members of Amateur Radio NSW are invited to the second part of our HF antenna presentation. Its starts at 10am on Sunday the 28th of April 2024, here at VK2WI Dural.

This event will feature presentations of interest for all levels of expertise, and a further range of specialist presenters. It's an opportunity to;

Gain insights into portable operation;

Learn techniques and strategies to enhance your home station; And connect with specialists, eager to assist and guide others.

The event is catered, and RSVP are essential for seating and catering purposes – we are not able to admit 'walk-ins' on the day.

Places are limited, so reserve your spot now by emailing <u>events@arnsw.org.au</u>, including your name, callsign and contact information.

Advised by AI VK2OK Event Co-ordinator for ARNSW.

Weekly Solar and Geophysical Report

Dates across	15 th	16 th	17 th	18 th	19 th	20 th	21 st
the columns are							
10cm Flux	129	144	151	177	169	176	197
Fredericksburg	8	3	2	5	7	3	20
A-Index							
Australian	3	1	1	3	6	2	14
A-Index							estimated
T index	115	117	122	131	137	133	138

For the period of the 15th to the 21st of March. First, the summary of activity;

Solar activity reached R1 on the 16th with 2 M-class flares; R2 on the 18th with 3 M-class flares; R1 on the 19th with 2 M-class flares; R2 again on the 20th, with three M-class flares, the largest M7.4 at 0736UTC; and R1 on the 21st with one M2.0 flare.

Geomagnetic activity remained below warning threshold, although a weak geomagnetic impulse of 16 nanoTesla was observed on the 21st of March at 0250UTC.

F2 critical frequencies in Southern Australia were mostly near predicted monthly values, with some periods of enhancements; 15% during local night on the 17th; 20% during local night and after dawn on the 18th; 15% during the day and 20% during the night on the 19th; 15% during both day and night on the 20th; and 20% during the day and 15% during the night of the 21st.

The forecast, issued on the 22nd of March, through until the 28th;

Solar activity is expected to be at R1 to R2 levels.

Geomagnetic activity is expected to remain low for most of the week, with G1 possible on the 24th until the 26th, due to coronal hole induced activity.

Maximum usable frequencies are likely to be near predicted monthly values, up to 15% enhanced.

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 February, we had a;

Minimum of 136, Average of 172, and a Maximum of 208 With peak dates from the 6^{th} to the 16^{th} , and the 23^{rd} to the 26^{th}

Nearing the end of March, we are expecting a;

Minimum of 127, Average of 153, and a Maximum of 197 With peak dates from the 19th to the 31st

And looking ahead to April, we are expecting a;

Minimum of 145, Average of 157, and a Maximum of 165 With peak dates from the 8th to the 8th, and the 16th to the 28th.

Update with thanks to Noel, VK2FUL.

[using daily data updates from : <u>http://www.swpc.noaa.gov/products/usaf-45-day-ap-and-f107cm-flux-forecast]</u>

[Play File: 15-E-ID2.wav]

Technical Feature

Continuing with our series, introducing various aspects of DMR... and Matt VK2FLY answers, his most frequently asked question...

[Play File: 16-TF-DMR7.wav] Duration: 4m55s In: What do you think ... Out:....Matt VK2FLY.

[Transcript]

What do you think is the most common question I get asked in relation to DMR? Do you have a code plug for XYZ band radio? But what the hell is a code plug and why can't people seem to make them for themselves? Well, to the first question, the term code plug is used by Motorola staff and salespeople.

It's the name Motorola adopted for what simply is a configuration file for your radio. It's a callback to when you needed to make a config file for Motorola radios, burn it into a ROM and plug it into the radio. So the answer really is you only need a code plug if you happen to own a Motorola. Other than that, you need a config file for your radio.

Almost all DMR radios use some type of config file that is generated by some software and then uploaded to the radio. The config file simply contains the setup for the radio. Information like the frequency of the repeaters, the splits, the talk group, and the time slots. None of the information should be too hard to understand or configure.

It might take some trial and error and even some patience, but it should not be beyond any amateur to do it unassisted. I find the best way to start is to gather the information you need to build the radio's config, get the frequencies for the repeaters or hotspots you want to access, and do this. I usually allocate each repeater its own zone.

Then, within the zone, add some channels. The channels on VKDMR are always the same for every repeater. They will include the talk group 505, timeslot 2, and the talk groups 3801 through 3810, timeslot 1. At its very simplest, this is all you need. A single repeater or hotspot in a zone, and then 11 channels.

Above that, you need to be careful to add your radio ID, which is a unique ID you will need to apply for on the net. It's no harder than that. Start off small with one repeater or a single hotspot. Once you have things working, you can try and add more repeaters. The other thing to remember is not to switch on any special features early.

This is where things can get confusing. If your radio has promiscuous mode, you will want to disable it. Promiscuous mode is a bit like a scan. It will listen to multiple talk groups, and you'll hear the audio no matter what talk groups are in use. This can be useful, but in the initial stages, very confusing, as some radios jump the transmit talk group to the last talk group heard, when in promiscuous mode.

A situation then occurs where you have no idea what talk group you're transmitting on. Not good for first time adventurer into DMR. So turn that off. You will also want to turn off any location sending or GPS features, as they're not supported on the VKDMR network. Again, make the config as simple as possible.

Get it working, and then work your way up. Another thing you may want to try is to load a DMR radio database into your radio. The database will allow your radio to display the caller's name, call sign, and perhaps even their location on the screen of your radio when you hear their transmission. As we know, there are a wide range of DMR capable radios.

Some radios allow many contacts to be loaded into their memory. Other radios will only allow a limited amount. A worldwide radio ID database has hundreds of thousands of entries, and only a small number of DMR radios will accept that entire table. So you may need to limit the amount of contacts to load into your radio to just VK, for example.

There are a number of places you can download these databases from, so they can be imported into your radio software and in turn uploaded into the radio. A good place to start is the ARNSW config generator, which will dump a limited radio ID database that just contains VK users that are using the VKDMR network.

The database will fit into most radios, and there is a number of options on the site for different radio types. So, really now you have the basics for making a config file for a DMR radio. The main thing to remember is you can't really break the radio, and other than upsetting a few OMs on the air with your radio checks, you can't really go wrong by giving it a go.

You will also get a kick out of having a config on your radio that is unique to you and exactly the way you want to operate, rather than using a hand me down. Join me next week where we'll wrap up the series. Till then, this has been Matt, VK2FLY.

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: 17-FOAR094.wav]

Duration: 2m36s In: A phrase I hear... Out: ...I'm Onno VK6FLAB

For more information about this series, including audio, transcripts and other useful amateur radio resources, Onno's website is; <u>vk6flab.com</u>; and you can contact Onno by email, to <u>cq@vk6flab.com</u>.

[WICEN News]

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

[Play File: 18-E-WNS0324.wav]

Duration: 2m12s In: WICEN holds meetups... Out: ... at wicen.org.au

[Transcript]

Memberships are due for renewal from 1 April, but if you join or renew before then you can score the Early Bird discount. Email <u>wicen.treasurer@vrarescue.org</u>.

This week, WICEN has been providing comms support for a multi-agency navigation exercise in the Turon Valley area. Hopefully we'll soon have some pictures to share on social media.

WICEN is supporting Dementia Australia's "Memory Walk and Jog" events throughout 2024. WICEN South Australia was active today in Adelaide, and the next event in New South Wales is at Speers Point on the Central Coast on 12 May.

The Memory Walks are great "starter" events for new (or rusty) WICEN members, as they take only a couple of hours. WICEN also provides the radios for these events, so you don't even need to bring your own gear. Why not give one a go? You'll find a link to the events list in the text edition of this news.

To participate in any WICEN event, or just find out more about how you can use your Amateur Radio skills to benefit the community, you can email <u>wicen.ops@vrarescue.org</u>.

WICEN nets take place every Sunday evening, using FM voice, DMR, P25, or HF voice, depending on the week. All WICEN members and other Amateurs are welcome to call 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 WICEN's Kurrajong VHF DMR repeater, followed at 6.45pm by a net on WICEN's VRA P25 repeater.

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

WICEN is also on Facebook, and on X; there, you can find photos and information about recent and upcoming WICEN activities. Links are in the text edition of this news.

For information about other WICEN groups around Australia, visit the web at wicen.org.au.

[Memory Walk and Jog Events: <u>https://www.memorywalk.com.au/find-an-event</u>] [WICEN NSW web site: <u>https://nsw.wicen.org.au/</u>] ["National" WICEN on Facebook: <u>https://www.facebook.com/groups/124735400158</u>] [WICEN NSW facebook at <u>https://www.facebook.com/WICENNSW</u>] [WICEN NSW X at <u>https://twitter.com/wicennsw</u>] [Play File: 19-E-ID3.wav]

Club News

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

The Club's April general meeting will be at 2pm on Saturday the 6th of April, at the SES building in Port Macquarie. The April Coffee Morning is at 10am on Thursday the 11th of April, at Brooklyn's Burger Bar, Thrumster.

It is now time to plan to attend the Club's 48th Annual Field Day. It is at the Wauchope Showground Hall on Saturday and Sunday the 8th and 9th of June, during the Kings Birthday Long Weekend. The Field Day Dinner will be at Port Macquarie Golf Club on Saturday night. Don't forget to book accommodation early, as the area is a very popular holiday destination during the Long Weekend. It is possible to camp at the Wauchope Showground in your tent, caravan, or motor home; more details are on the Wauchope Showground website.

The next Foundation Licence training and assessment weekend will be held as soon as sufficient candidates have registered. Candidates for the Foundation Licence and for assessments for all grades of licence can register their interest via the contact form on the ORARC website.

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 <u>orarc.org</u>. The site contains a wealth of Amateur Radio items in addition to club information. The January 2024 issue of the club's bimonthly newsletter "Oxtales" is now online, and past issues are on the website as well. The March addition has been delayed, but will be published in early April. The club is also on Facebook; just search for Oxley Region Amateur Radio Club.

From Henry VK2ZHE For the Oxley Region Amateur Radio Club.

Central Coast Amateur Radio Club

The club rooms will be closed on Easter Saturday, March 30. The next monthly general meeting will be the following Saturday, April the 6th, starting at 1pm. As always, members and visitors are most welcome.

Yesterday was the Club's regular show and tell, with the theme of *"It looks the same, but is it?"*

At the VK2RAG Somersby repeater site, the 6-metre repeater, D-Star, Rad-Net DMR and 2m EchoLink, 70cm and 23cm, are all fully functional. The WICEN UHF MMDVM is still having problems.

The Somersby WebSDR is online at <u>websdr.ccarc.org.au;</u> its configured to listen on 6 metres, 2 metres, 70 centimetres and 23cm.

The Club's Weekly net is on Thursday Nights at 8pm. It's on the VK2RAG 2 metre repeater – 146.725MHz with a 91.5Hz sub-audible tone, and on the CCARCNSW and HAM EchoLink conferences. It 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 <u>ccarc.org.au</u> – 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 next meeting of the Club's is on Friday the 5th of April at the clubrooms, 4 Moore Street Glenbrook, in the Blue Mountains – doors open from 7pm.

April's guest speaker will be Russell Bryant; an all-round radio scanner aficionado, who will give us the benefit of his broad experience in the field from simple systems to the modern complex devices seen today.

The clubrooms are also open twice a month from about 10am, on the morning of the first and third Saturdays – unless otherwise noted on the Club's Facebook page.

Visitors and prospective new members are always welcome.

The Clubs has several weekly nets – we have details in "Activities on the air" later in this bulletin – and a new net time, Sunday nights at 8pm. On the 1st and 3rd Sunday of the month, the net is on the Club's 6 metre repeater, and on the 70cm repeater on the second and fourth Sunday.

The next Foundation Class will be on Saturday the 13th of April. Upgrade classes continue on Wednesday nights, both on Zoom and in-person at the Glenbrook clubrooms.

With a 98% pass rate, the Club's courses and exam days do fill-up quickly; please contact Club secretary, Irene VK2VAN via email to; <u>secretary@bmarc.org</u> for class dates, to register, or for more information.

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

Steven VK2TSG President, Blue Mountains Amateur Radio Club.

Fisher's Ghost Amateur Radio Club

The next General Meeting of the Club is on this Wednesday the 27th of March, 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, and is also on EchoLink.

To find out more about the Club's activities, visit the website at <u>fgarc.org.au</u>, and Facebook, by searching for VK2FG.

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

St George Amateur Radio Society

The next gathering of the Society will be on Wednesday the 3rd of April.

The Society's gatherings are now at Mortdale RSL club. The Club is in Macquarie Place, a 5-minute walk from Mortdale railway station. The club has excellent dining facilities and members are encouraged to arrive early for a bite to eat before the gathering.

At the gathering as well as the business stuff, there will be a presentation by Peter VK2EMU on "3D printing and laser cutting for Amateur Radio".

While 3D printing is not new, in the last few years the prices of machines has dropped, so they are now affordable for casual hobbyists. Many items useful to radio experimenting can either be printed or laser cut. Examples of various items will be displayed and open-source software for designing 3D prints and laser cuts will be demonstrated. Attendees with items that they have 3D printed or laser cut are invited to bring them along.

If you or somebody you know is interested in becoming licenced – or upgrading their licence – the St. George Amateur radio Society's next foundation course and examinations weekend is in late April. Details are on the website.

Details about the Society's repeaters, courses, along with the Society's other activities, are on the website, <u>www.sgars.org</u>.

All are invited to the next gathering of the Society, now at Mortdale RSL club, 7:30pm on Wednesday the 3rd of April.

73 de Peter VK2EMU Publicity Officer, St George Amateur Radio Society.

[ID4 and Activities on the air]

[Play File: 20-E-ID4-AOTA2.wav]

Duration: 5m33s In: [IDENT 4] Out: ...the office phone, 02 9444 0123.

[Transcript] I'm Mathew VK2YAP.... And I'm Stuart VK2BMX.

It's time for your quick trip around the bands for this week, with; 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.

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, on 146.975MHz.

The **Blue Mountains ARC** D MR Net at 7:30pm on Brandmeister 50520, hosted by Ben VK2AFK.

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: starts at 8pm on Talkgroup 505.

Blue Mountains ARC net from 8pm, 3543kHz.

St George ARS digital net, 8pm on 146.8MHz

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

[...continues]

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 146.975MHz and EchoLink node 1474.
HADARC 8pm on 3608.5kHz
Blue Mountains ARC 8pm on VK2RBM, 147.05MHz, 123Hz tone.
Amateur Radio Central West Group from 8pm on 3653kHz.

Armidale District ARC net 8:30pm on 3633kHz.

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 8:00am, usually on Talkgroup 3802.

Oxley Region ARC from 9am, VK2RPM.

WICEN NSW nets; 6pm on Chatswood 2m or Kurrajong 70cm repeater, 6:30pm on DMR or HF, and 6:45pm on P25. Check website for details.

Don't forget to get <u>your</u> activities on the air <u>here</u>... send us through the details of your activity! Email the details, to <u>news@arnsw.org.au</u>... or leave a message on the office phone, 02 9444 0123.