

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

This week VK2WI News returns to both the morning and evening bulletins. Should HF reception be proving difficult, we are trialling a live stream of the news bulleting, go to [arnsw.org.au/audio](http://arnsw.org.au/audio) and you can hear the news live; with only a short delay.

The first positing of badges for ARNSW Members should be delivered this coming week. The current offer closes just after the January Trash & Treasure on Sunday the 29<sup>th</sup> Post that form in now, bring it with you to the T & T or fill out a form at the T & T and give it to Bob VK2CAN on the day. Bob can also take renewals, membership or tell you when your renewal is due.

A note about the membership card; the renewal date appears on the card in the American format of month before day. To read the card the first group of figures is from 1 to 12 for the month. The second group is a 1 for the first of the month when the renewal become due and the third number group is the year. So a number of 7 / 1 / 2017 means renewal is due on the 1 st of July 2017; not January. All renewals are advised by a letter sent out about a month before the renewal is due, and you can always check your membership status by an email to; [membership@arnsw.org.au](mailto:membership@arnsw.org.au).

The last Trash and Treasure was very well attended; so well, the BBQ ran out of sausages. The moral of the story - don't be a late starter; 9 am is a good time to aim for. Those arriving earlier have to opportunity to check out the free table on the verandah.

Boot sellers are most welcome but remember ARNSW does not accept donations left behind, except by arrangement. If it does not sell then take it home - we don't have a Council garbage service and remember the cameras are watching.

Across the world it appears that Foundation licenses are popular. Late last year in the United Kingdom, their Foundation was about 25% of the total licenses issued. Thanks to figures from the January Westlakes magazine we learn there are a total of 84694 licenses in the UK with their Foundation at 21791, Their Intermediate at 9348, the Full at 52075. There are 1478 Club licenses and 2 Temporary which are a reciprocal.

## **Council Elections**

As previously announced, the Annual General Meeting of the Wireless Institute of Australia New South Wales Division (trading as Amateur Radio New South Wales), will be held on Saturday 29th April 2017.

At the AGM a new council is to be appointed. Nominations will shortly be open for those members who wish to be on the Council for the year 2017 and 2018. Nomination forms will shortly be available for download from the website [arnsw.org.au](http://arnsw.org.au), or from the office.

Nominations will close on Saturday 18th March 2017.

Peter O'Connell VK2EMU  
Divisional Returning Officer

## Education Update

The next ARNSW Foundation weekend is in March, on the 18<sup>th</sup> and 19<sup>th</sup>, enquire to [education@arnsw.org.au](mailto:education@arnsw.org.au). Waverley is also running a weekend in February, details later in the bulletin.

In the ACT, the Canberra Region ARC is also running a Foundation weekend in March, details can be found on their website, [www.crarc.ampr.org](http://www.crarc.ampr.org).

Other education activities include Standard Courses, and ARNSW is running a weekly series of classes starting on Monday the 6<sup>th</sup> of March and continuing until November, excluding public holidays. Classes start at 7pm and run until about 9pm. The classes are suitable for both Foundation Licence holders, as well as for beginners. Enquiries and bookings to the usual email address; [education@arnsw.org.au](mailto:education@arnsw.org.au).

In early March - the Summerland A R C at Lismore has a Standard course from Monday the 6<sup>th</sup> until Thursday the 9<sup>th</sup> of March, followed by a Foundation course on the following weekend; Saturday the 11<sup>th</sup> and Sunday the 12<sup>th</sup>.

Finally, if you are interested in obtaining a US Amateur Licence, examinations will be held at this year's Wyong Field Day, under the ARRL/VEC. Examinations will commence at 9:00 am.

Note that candidates need to do all papers up to the level of the licence they desire. The fee will be US\$15, or around A\$21, covering one to three papers, with licences issued for free.

Candidates will need a US postal address, such as that of a friend, or a ShopMate address; and then to use this address to obtain an FCC Registration Number, or FRN, from the FCC website.

A Facebook page has been set up at: [facebook.com/usahamsinoz](https://facebook.com/usahamsinoz)

## **ARNSW Radio Homebrew and Experimenters Group**

The monthly net for the Radio Homebrew and Experimenters Group is on this Tuesday evening the 17th. The net starts at 8:00pm on the Dural 2 metre repeater, 147.0MHz and then at about 8:30pm will transfer over to HF. Depending upon conditions, the net may be on either 80m or 40m.

The 80m frequency will be 3686.4 kHz and the 40m frequency will be 7159kHz - both of which are cheap crystal frequencies. As well as store bought equipment, participants are encouraged to use homebrewed equipment on AM, DSB or SSB.

The next bi-monthly meeting of the group is on Sunday the 29th, after the next Trash and Treasure. It's at the usual location - here at VK2WI, 63 Quarry Rd Dural.

This month, Michael VK2BMR will be giving a presentation on using the free LT Spice circuit simulation software, for the design of power supplies.

He will be focusing on a high voltage low current design for a 4CX250B amplifier. He will also be demonstrating how the choice of capacitor values can affect the design of low voltage, high current supplies where ripple before a regulator can cause problems with dropouts. Particular attention will be paid to the production of graphs.

The meeting will start with the usual "Show and Tell" segment where members of the audience get up to show some project that they have been working on.

There will also be the presentation of the Homebrew Challenge - build something in a Christmas Biscuit Tin - only rule - no 240 Volts AC. So, if you have built something in a biscuit tin, then bring it along to show.

*Advised by Peter VK2EMU  
Coordinator, ARNSW Radio Homebrew and Experimenters Group*

## Weekly Solar and Geophysical Report

For the period of the 6<sup>th</sup> to the 12<sup>th</sup> of January.

First, the summary;

Dates across the columns are	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
10cm flux	72	72	72	71	73	75	76
Fredericksburg Index (Afr)	15	14	11	8	5	7	5 estimated
Australian Index (Aaus)	13	13	12	8	7	5	1 estimated
T index	12	-1	-12	-24	-15	-20	-2

Solar flare activity was very low from the 6<sup>th</sup> to the 11<sup>th</sup> and low on the 12<sup>th</sup>.

Geomagnetic activity observed for the Australian region, was quiet to unsettled on the 6<sup>th</sup>, quiet to active from the 7<sup>th</sup> to the 9<sup>th</sup>, quiet to unsettled on the 10<sup>th</sup>, then quiet for the rest of the week.

F2 critical frequencies in the southern Australian region, started out near predicted on the 6<sup>th</sup> and local day on the 7<sup>th</sup>, but then were depressed 15% during local night on the 7<sup>th</sup>. The 8<sup>th</sup> saw depressions of 15% during the 15% during the day and 20% just after dawn, returning to near predicted for the local night. The 9<sup>th</sup> was depressed, 25% day and 15% night, the 10<sup>th</sup> depressed 25%, the 11<sup>th</sup> depressed 25% day and 20% night, and the 12<sup>th</sup> depressed 15% local day before finally showing some improvement, with local night returning to near predicted monthly values.

Now, the forecast for the 13<sup>th</sup> to the 19<sup>th</sup> of January;

Solar flare activity should be low with a chance of some moderate activity.

Geomagnetic activity is expected to reach active levels between the 17<sup>th</sup> and 19<sup>th</sup>, with quiet to unsettled conditions expected on other days.

Maximum Usable Frequencies are likely to be moderately depressed between the 17<sup>th</sup> and 19<sup>th</sup>, otherwise near predicted monthly values.

*Data courtesy of Space Weather Services.*

## Solar Flux Index update

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

Firstly the figures for December were;

Minimum 71      Average 76      Maximum 86  
Peak dates from the 1<sup>st</sup> to the 8<sup>th</sup>

Now the prediction for January,

Minimum 71      Average 76      Maximum 85  
Peak dates between the 14<sup>th</sup> and 26<sup>th</sup>

And looking ahead to the prediction for February;

Minimum 72      Average 74      Maximum 76  
With peak dates between the 10<sup>th</sup> and 22<sup>nd</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>]

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## **ARRL DX news**

SRI LANKA, 4S. Peter, DC0KK is active as 4S7KKG from Moragalla, IOTA AS-003, until April 1. Activity is on 20 to 10 metres using mainly CW with some digital modes. QSL to home call.

ZAMBIA, 9J. Peter, JK1UWY is active as 9J2HN from Lusaka. He is active on 160 to 6 metres using CW, SSB, RTTY, SSTV and PSK. QSL via JR2KDN.

TEMOTU PROVINCE, H40. Darren, VK4FEDX is active as H40DA from Nendo Island, IOTA OC-100, until January 17. Activity is on 80, 40, 15 and 10 metres. QSL to home call.

HAITI, HH. Operators Dale, N3BNA and Harry, N3FMO are active as HH8/N3BNA and HH8/N3FMO, respectively, until January 25 while performing some humanitarian and radio work. Activity is in their spare time. QSL to home calls.

ANTARCTICA. Juan, LU4CJM is active as either LU1ZI or LU4CJM/Z from Carlini Base until the end of February. Activity is on 80, 40 and 20 metres. QSL via operator's instructions.

BULGARIA, LZ. Members from the Headquarters of the Thracian Rose Club are active as LZ73TRC during all of 2017. QSL via LZ1YE.

SOUTH SHETLAND ISLANDS. Members of the Peruano Radio Club of Peru are active as OA0MP from the Machu Picchu Antarctic Base on King George Island, IOTA AN-010, until March 31. Activity is mainly on 40 and 20 metres using SSB. QSL via OA4O.

BANGLADESH, S2. Yuki-san, JH1NBN plans to be active as S21ZBA from Dhaka until January 19 while on a business trip. Activity will be in his spare time primarily on 80 and 40 metres using SSB. QSL to home call.

PALAU, T8. Hirotaka, JA6KYU, Kouko, JQ6FQI, Ichiro, JH7IPR, Mike, JA6EGL and Yasushi, JI6BFF are active as T88HS, T88WM, T88UW, T88SM and T88TK, respectively, from Koror Island, IOTA OC-009, until January 19. QSL to home calls.

CANADA, VE. Special event station VE100VIMY commemorates the Battle of Vimy Ridge in April 1917 and is active as VE100VIMY/VE3 and VE100VIMY/VE4 from different regions of Canada during January. QSL via N7RO.

BRITISH VIRGIN ISLANDS, VP2V. Andy, W4KDN, Charlie, W4KZK and John, WA5FAC will be active as VP2VAW from Tortola from January 14 to 21. Activity will be holiday style on 160 to 10 metres using CW, SSB, PSK31 and JT65 with three stations active. They also plan to activate 60 metres. This includes entries in the North American QSO Parties. QSL direct to W4KZK.

FALKLAND ISLANDS, VP8. Dave, VP8CLE and Carol, VP8DKW will be active from Saunders Island, IOTA SA-002, until January 22. Activity is on 160 and 80 metres, and possibly other bands as well, using CW, SSB, RTTY and PSK. QSL direct to G1OCN.

INDIA, VU. Members of the West Bengal Radio Club are active as AU2WBR from Ganga Sagar Mela, IOTA AS-153, until January 17. QSL via VU2NRO.

UK SOVEREIGN BASE AREAS ON CYPRUS, ZC4. Steve, G0SGB is active as ZC4SB until January 25. Activity is on 80, 40 and 20 metres using CW and SSB. QSL direct to home call.

CAYMAN ISLANDS, ZF. Peter, K8PGJ will be active as ZF2PG from Grand Cayman Island, IOTA NA-016, until January 22. This includes an entry in the North American CW QSO Party. QSL direct to home call.

THIS WEEKEND ON THE RADIO. North American CW QSO Party, AWA Linc Cundall Memorial CW Contest, NCCC RTTY Sprint, QRP 80-Meter CW Fox Hunt, NCCC Sprint CW Ladder, Old New Year Contest, UBA PSK63 Prefix Contest, NRAU-Baltic SSB Contest and NRAU-Baltic CW Contest are all on this weekend.

The Run for the Bacon QRP CW Contest is scheduled for January 16. The Phone Fray, CWops Mini-CWT CW Test and QRP 40-Meter CW Fox Hunt are scheduled for January 18.

## WICEN News

On Sunday, February 26th, WICEN will be represented at the CCARC Field Day, which is an opportunity for members to renew their membership.

Also on the 26th is the first of a series of Memory Walk and Jog events. The first is at Wollongong, and the Penrith walk is March 12th.

The WICEN New South Wales website, at [nsw.wicen.org.au](http://nsw.wicen.org.au) - includes contact details, a web contact form, and membership information. WICEN members can log in on the site and then see meeting Agendas on the main page.

WICEN has a twitter account: @wicennsw. Facebook users will find the official WICEN NSW page, and an informal national WICEN group.

Northern Rivers region runs a weekly net on Tuesdays at 8:00pm local time, on the Lismore repeater VK2RSC on 146.8 MHz, requiring a 123 Hz tone. Listen for VK2WIR.

WICEN ACT is part of the Canberra Region Amateur Radio Club, supporting events in the ACT and Capital Country. The website is [crarc.ampr.org](http://crarc.ampr.org).

WICEN Victoria holds a net every Tuesday at 2030 on or near 3.6 MHz. Their next events are a Fun Run on the Mornington Peninsula on January 26, and the Field Weekend at Yea is on March 4th and 5<sup>th</sup>. Their website is: [vic.wicen.org.au](http://vic.wicen.org.au).

*Submitted by Julian VK2YJS  
on behalf of the WICEN NSW State Management Committee.*

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## Club News

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

The next meeting of the Club is the Friday night get together at 7pm this Friday the 20<sup>th</sup> of January.

Club station VK2BOR participated in the Summer VHF UHF Field Day yesterday, Saturday the 14<sup>th</sup>, operating portable from North Brother Mountain.

The club's 2017 calendar is available at club activities. There are no 2017 WIA Callbooks left from the first batch but orders are being taken for a second batch.

Candidates for the Foundation, Standard and Advanced Licences should contact the club via PO Box 712 Port Macquarie NSW 2444. The Advanced Licence classes are again running on Friday nights. The next training course and assessments for the Foundation licence will run when sufficient candidates have registered.

The club conducts two nets each week; the mid-week net starts at 7:30pm on Thursday nights, and the weekend net takes place from 9am on Sunday mornings. Both nets are on the VK2RPM 2 metre repeater, 146.7MHz. This repeater requires a 91.5Hz subaudible tone for access.

Visitors are always made very welcome at monthly general meetings, at 2pm on the first Saturday of the month, as well as at Friday night gatherings, at 7pm on the third Friday of the month. The venue for all club meetings is the SES Building in Port Macquarie.

For more information about the Oxley Region Amateur Radio Club, visit the website at [orarc.org](http://orarc.org). There you will find a wealth of Amateur Radio items in addition to club information. The November 2016 web edition of the club's bimonthly newsletter "Oxtales" is now available from the website, and past issues can be viewed there too. Look for the January 2017 issue during the coming week.

*Submitted by Henry VK2ZHE  
for the Oxley Region Amateur Radio Club.*

## **Illawarra Amateur Radio Society**

The next meeting of the Society is on Tuesday the 14<sup>th</sup> of February. The general meeting starts at 7.30pm, right after the Committee Meeting at 6:30pm.

Meetings are at the Coniston Community Hall located in Bridge Street Coniston, which is just a little south of the CBD of Wollongong. The hall is located right next door to the Coniston Railway Station, so access to meetings by train is very easy.

The next meeting is a "Show us your Shack" night, with attendees invited to bring along photos or videos of their shack, antennas or even favourite project to be shown on the big screen. The last time this was done, we ran out of time looking at all the interestingly different set-ups everyone had at home. Additionally, raffle tickets will be available for a fantastic prize to be won at the meeting. You'll have to come along to see what it is!

The VK2RUW 146.675MHz repeater at Knights Hill is currently off the air awaiting a total refurbishment and hopefully even better coverage.

ARNSW News Broadcasts are relayed through two of the Illawarra Amateur Radio Society's repeaters, they being on 6 metres on 53.650MHz and 2 metres on 146.850MHz at Maddens Plains, servicing Wollongong and much of Sydney.

As the VK2RMP two metre repeater is also linked to Echolink, the AR NSW Broadcast can also be heard through Echolink stations VK2MT-R and VK2BGL-R.

If you're interested in having a bit of a chinwag on Saturday mornings, Steve VK2BGL runs a very popular net on the 6850 repeater starting at 9.30am. As this repeater is connected to Echolink, the Net gets call-ins from all over Australia as well as many different other countries. So put the time of 9.30am in your diary & call-in next Saturday morning on 6850 repeater or on Echolink via VK2MT-R and VK2BGL-R.

Additionally, the Illawarra Amateur Radio Society is presently trialling a Yaesu Fusion C4FM repeater on VK2RMP 438.725MHz at Maddens Plains. The 70cm repeater operates with the usual 5MHz negative offset with a 123Hz CTCSS access tone necessary for FM users.

The repeater is operating in Auto Mode, so analogue FM transmissions are retransmitted in FM, while digital C4FM signals are retransmitted in C4FM. Any users of this new digital mode are invited to make use of this UHF repeater on 8725.

So don't forget, for a great evening of entertainment and information, come along to the Illawarra Amateur Radio Society's next meeting at 7:30pm on February the 14th at the Coniston Community Hall.

*Submitted by Rob VK2MT*

*Publicity Officer for the Illawarra Amateur Radio Society*

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

Just a last minute reminder that entries for the Ted Powell Memorial DX Challenge close at 2359 UTC on the 14 of January.

If you are listening to the morning bulletin, you literally only have minutes to get your entry in if you haven't already done so; head over to [www.vk2au.org](http://www.vk2au.org) where you will find several easy ways to enter.

The website again; [www.vk2au.org](http://www.vk2au.org).

*Submitted by Peter VK2PR  
For the Fisher's Ghost Amateur Radio Club.*

## **Waverley Amateur Radio Society**

The first monthly for the year is this Wednesday, January 18th. At this meeting Tony, VK2KZ, will be giving a report on the symposium held in Canberra last November, which he attended, on the STEM program. This should be an interesting talk and will include some plans as to how we can get involved.

The next space special interest group get together is scheduled for this Tuesday, January 17th, from 7:00pm.

The next "Shack night", will be on Wednesday, February 1<sup>st</sup> commencing at 7:30pm, a good time to bring along that new rig or to get some help to program it or learn how to use it or test it on the club's antennae. The next Project Day is scheduled for Saturday, February 4<sup>th</sup> commencing around 1:30pm usually running through to about 4:30 or 5:00pm.

On most Tuesdays there is a working bee at the clubhouse from around 10am to 4pm. A quick call on the Paddington 2 metre repeater will confirm that it is open.

The club runs a weekly net every Monday evening, commencing at 8pm on our VK2RBV Fusion repeater in FM mode on 438.1125MHz, minus 5.4MHz offset and 91.5Hz CTCSS tone. A listening watch is still kept on the Paddington 2m repeater.

Skip's Morse sessions are continuing on Thursday evenings, initially on 20m, around 14.020MHz, from 2000 to about 2015, then moving to the Paddington 70cm repeater using AFSK.

The first Foundation course and upgrade assessments for 2017, run by the club, will be over the weekend of February 11th and 12th. To book and reserve your place, see our website, under Education and Training.

Waverley's clubhouse is located in the Scout Hall in Vickery Avenue, Rose Bay with parking available in the grounds. Visitors are always welcome at any of the club's activities.

There is full information about the club on its regularly updated website at [vk2bv.org](http://vk2bv.org). The website includes the capability to renew membership and also purchase items such as Powerpole kits or book and pay for courses or assessments online. There is also an enquiry form as well.

*73 from Eric VK2VE  
Broadcast Publicity Officer*

## Manly-Warringah Radio Society

This Wednesday is lecture night at the Manly-Warringah Radio Society. For this first post-Christmas lecture a couple of club members will be displaying their recent acquisition, namely the ICOM IC 7300 HF + 6 metre transceiver. If you are thinking about buying one of these radios, or would just like to come along and drool, come along on the 18th of January.

Last month's lecture, on the FlexRadio 600 series Software Defined Radios, is now available on the club's YouTube channel. Just go to the club web site and click on the VK2MB-TV link, or go to YouTube and search for VK2MB.

Also, a reminder that the club's new Web-accessible Software Defined Radio is now operational. Any time, from anywhere, you can tune your computer or mobile device into any of five HF bands and hear what signals are audible in Sydney. This project has been generously sponsored by Amateur Radio New South Wales, and is proving to be very popular. Just go to the club web site, [www.mwrs.org.au](http://www.mwrs.org.au), and click on the WebSDR link in the top menu.

[direct link: <http://websdr.mwrs.org.au:8901> ]

The Manly-Warringah Radio Society meets every Wednesday evening at the 1st 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 two metre repeater on 146.875 MHz, or visit the club's web site at [www.mwrs.org.au](http://www.mwrs.org.au) for more information.

*73 Richard VK2SKY,  
MWRS Publicity Officer*

## Hornsby and Districts Amateur Radio Club

Around 20 HADARC members enjoyed dinner at a venue in Waitara on Tuesday evening, with a wide range of topics discussed, and a few interesting toys shown off.

The club runs three nets each week; Monday nights at 8pm on the VK2RNS 2 metre repeater. Its on 147.25MHz, No tone is required, but a 91.5Hz tone is sent. The Wednesday evening net is on 3608.5 kHz, also from 8pm; And Morning Tea with HADARC – is on or near 7104kHz from 9:00 am on Fridays.

The Club operates has a dual mode FM and P25 repeater, located at Chatswood. It is on 438.350 MHz, with a -5.4 MHz offset, meaning users transmit on 432.950 MHz. A 91.5Hz tone is required for FM users, or the default NAC of 293 for digital users.

Club meetings resume at the Mount Colah community centre on Tuesday, February 14<sup>th</sup> 2017. Given the date, something extra romantic may be required the weekend before: lunch or dinner in a French café or restaurant, such as those on the Rues of the French settlement of Akaroa, in the glorious Bank Peninsula area of ZL3.

HADARC's website is at: [www.hadarc.org.au](http://www.hadarc.org.au). The club has a group on Facebook. which can be found by searching for VK2MA. The Club's twitter feed is @VK2MA. You can also see it on the web, at [twitter.com/VK2MA](https://twitter.com/VK2MA).

*Submitted by Julian VK2YJS.*

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## **Summary of coming events;**

### **January**

ARNSW Homebrew group net on the 17<sup>th</sup>

Waverley ARS meeting on the 18<sup>th</sup>

Manly-Warringah lecture night on the 18<sup>th</sup>

Oxley Region gathering on the 20<sup>th</sup>

Australia Day on the 26<sup>th</sup> (you can use the AX prefix on your own callsign)

ARNSW Trash & Treasure and Homebrew group meeting, on the 29<sup>th</sup>

### **February**

Hunter Radio Group Meeting on the 10<sup>th</sup>

Illawarra ARS Meeting on the 14<sup>th</sup>

Manly-Warringah lecture night on the 15<sup>th</sup>

CCARC Wyong Field Day, last Sunday of the month, the 26<sup>th</sup>

### **March**

ARNSW Foundation weekend, on the 18<sup>th</sup> and 19<sup>th</sup>