

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

First off, there was a Birthday yesterday... On the 11<sup>th</sup> of March 1910, there was a meeting at the Hotel Australia in Sydney. This meeting resolved to form an organisation, then called the Institute of Wireless Telegraphy of Australia, which later became the Wireless Institute of Australia New South Wales Division. In 2004, the trading name changed to Amateur Radio News South Wales. ARNSW is the oldest Amateur radio club in Australia and one of the world's oldest Amateur Radio organisations.

The ARNSW upgrade course commenced last Monday night and will continue each Monday evening, except on public holidays, until November. There are still vacancies for those upgrading from Foundation or under taking a study course for the first time - so anyone wishing to join should come along to the Dural site between 6 and 7 pm tomorrow evening.

Today was the second day of a Foundation and assessment weekend at VK2WI Dural. Five candidates took part in the course.

The next Foundation course will be in May, on the weekend of the 13th and 14th. Enquiries for all of our courses can be made by email, to; [education@arnsw.org.au](mailto:education@arnsw.org.au).

A reminder that ARNSW is inviting expressions of interest from duly constituted VK2 clubs and groups, to apply for Development Fund Grants.

Application forms and guidelines will be sent to groups who register their interest, by either an email to [office@arnsw.org.au](mailto:office@arnsw.org.au) or by mail to; PO Box 6044, Dural Delivery Centre NSW 2158. The offer closes on the 31st of March.

The next ARNSW Trash & Treasure Sunday is on the 26 th March 2017.

We are coming to the end of the first broadcast roster period and John VK2JV will be making a call for the next quarter, of April to June.

## **QRP by the Harbour**

The inaugural “QRP by the Harbour” was on today, at Mcilwaine [Mac-ILL-Wayne] Park in Rhodes.

We will have a full report in next week’s bulletin.

## US Licence exams

As reported on recent VK2WI News bulletins, The ARRL / VEC held exams at the Wyong Field Day last month.

All candidates successfully completed their examinations, and received a licence at the level for which they had prepared.

Congratulations go to:

Diane AG5JI  
Cameron KX4BS  
Stephen AG7FC  
Bill KG5SDI  
Bob KI7LIT

Thanks to CCARC for providing the facilities for the session.

The team also assisted Brian WD9GYO in obtaining an administrative upgrade to General.

More events are planned so keep listening for details.

*Julian VK2YJS / AG6LE  
on behalf of the team.*

## Council Elections

The Annual General Meeting of Amateur Radio New South Wales is on Saturday 29<sup>th</sup> of 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 are now available for download from the website, [arnsw.org.au](http://arnsw.org.au), or from the divisional office.

Nominations close at 11am next Saturday, the 18th of March.

*Peter VK2EMU*  
*Divisional Returning Officer*

Note: Amateur Radio New South Wales is a business name of the company registered as Wireless Institute of Australia New South Wales Division. This company was first registered as an incorporated entity in New South Wales, in 1922.

Since 2004, the company uses the business name Amateur Radio New South Wales to avoid confusion with the independent incorporated entity, The Wireless Institute of Australia.

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

The next bi-monthly meeting of the group is on Sunday the 26th, after the next Trash and Treasure. It's at the usual location - here at VK2WI, 63 Quarry Rd Dural.

This month, Bernie VK2ABN will be giving a presentation on building high power linear amplifiers. We hear and see a lot about build QRP or low powered rigs, but this will be about the challenges of high voltage and high power.

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, 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 3<sup>rd</sup> to the 9<sup>th</sup> of March.  
First, the summary;

Dates across the columns are	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>
10cm flux	78	75	73	72	72	71	71
Fredericksburg Index (Afr)	15	18	11	16	13	9	12 estimated
Australian Index (Aaus)	12	12	8	13	9	8	8 estimated
T index	16	22	4	7	1	6	9

Solar flare activity was very low for the week.

Geomagnetic activity observed for the Australian region, was quiet to unsettled from the 3<sup>rd</sup> to the 5<sup>th</sup>, quiet to active on the 6<sup>th</sup>, then quiet to unsettled again except for some isolated Active periods on the 9<sup>th</sup>.

F2 critical frequencies in the southern Australian region, were near predicted on the 3<sup>rd</sup> and 4<sup>th</sup>, then dropped to 20% depressed during the day and 35% depressed during the night on the 5<sup>th</sup>. Conditions recovered slowly, the 6<sup>th</sup> was depressed 15% day and 20% night, the 7<sup>th</sup> depressed 15% day and 30% night, and the 8<sup>th</sup> was depressed 20% day and 15% night. The 9<sup>th</sup> finally returned to near predicted values.

Now, the forecast for the 10<sup>th</sup> to the 16<sup>th</sup> of March;

Solar flare activity should be very low.

Geomagnetic activity is expected to see quiet to unsettled conditions between the 10<sup>th</sup> to 11<sup>th</sup>, and again on the 15<sup>th</sup> and 16<sup>th</sup>, but quiet otherwise.

Maximum Usable Frequencies are likely to mildly depressed on the 10<sup>th</sup>, before recovering to near predicted monthly values.

*Data courtesy of Space Weather Services.*

# Space Weather Summary for February 2017

*Compiled with data courtesy of Space Weather Services*

Solar activity this month was even lower than last month - Activity was predominantly at Very Low levels and no significant solar flares were observed. There were also no Proton events.

However, there was a coronal hole resulting in significant geomagnetic disturbance on the 1<sup>st</sup> of February. Disturbance reached Minor Storm levels, with a local A index of 20.

There was some ionospheric depression for the month, with the most significant being on 1<sup>st</sup> of February, due to the geomagnetic storm activity.

So, a bit more about coronal holes. Especially during the declining phase of a solar cycle, as we are in now, coronal holes are the sources of many of the disturbances to the geomagnetic field and, in turn, the ionosphere and HF communications.

A coronal hole is a region in the outer atmosphere of the Sun that is less dense and cooler than its surrounds. Such holes may appear at any time of the solar cycle but are most common during the declining phase.

Coronal holes occur when the Sun's magnetic field is open to interplanetary space. They appear on X-ray images as large dark regions. Conversely, in regions where the solar magnetic fields loop back to the Sun forming arches, both X-ray and UV images show bright areas.

The open configuration of the magnetic field in coronal holes allows particles to escape, so these holes are the source of high-speed solar wind streams. When the particles from these streams reach Earth, they can cause geomagnetic storms.

In general, geomagnetic storms originating from coronal holes have a gradual commencement - over hours - and are less severe than storms caused by CMEs, which usually have a sudden onset.

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## **ARRL DX news**

MAURITIUS, 3B8. Nigel, G3TXF is active as 3B8/G3TXF until March 21. This includes an entry in the RSGB Commonwealth contest and the upcoming Russian DX contest. Activity is on the HF bands, including the WARC bands, using mostly CW.

NIGER, 5U. A group of operators are active as 5U5R from Niamey until March 21. Activity is on 160 to 10 metres with four stations active simultaneously. They will be meeting with Nigerian officials to seek authorization for 6 metre operations.

BARBADOS, 8P. Dean, 8P6SH is active with special call sign 8P50B until December 31 to celebrate the 50th anniversary of independence from Great Britain.

GHANA, 9G. Members of Six G Team are active as 9G5X from Aburi in the Akwapim Mountain area until March 21. Activity is on 160 to 10 metres using CW, SSB and RTTY.

NEPAL, 9N. Kazik, SP6AXW will be active as 9N7XW from March 15 to 31 while on vacation with his family. Activity will be holiday style on various HF bands.

SPAIN, EA. Special event station EH3DWN is active until March 21 to raise awareness of Down Syndrome. This operation coincides with World Down Syndrome Day on March 21.

ST. MARTIN, FS. Serge, VE1KG is active as FS/VE1KG until the end of April. Activity is on the HF bands.

TEMOTU PROVINCE, H40. Sigi, DK9FN and Bernard, DL2GAC are active as H40FN and H40MS, respectively, until March 24. Activity is on the HF bands using CW and SSB, respectively. They have authorization to be active on 60 metres.

ICELAND, TF. Mason, KM4SII will be active as TF/KM4SII until March 19. Activity will be on 40, 20 and 17 metres using SSB.

COTE D'IVOIRE, TU. A group of operators are active as TU7C until March 19. Activity is on the HF bands.



BELIZE, V3. Ian, G4SGX is active as V31GX until March 14. Activity is on 80 to 10 metres using CW. This includes being an entry in the RSGB Commonwealth contest.

BRITISH VIRGIN ISLANDS, VP2V. Hugh, VE3AYR is active as VP2V/VE3AYR until March 16. In addition, Pat, N2IEN will be active as VP2V/N2IEN from March 15 to 18. Activity will be on the HF bands using mostly RTTY if conditions allow.

INDIA, VU. Madhukar, VU2MJD is active with contest call AT5M. He will be active in the RSGB Commonwealth contest, as well as a number of upcoming contests.

CAYMAN ISLANDS, ZF. John, AD8J will be active as ZF2AG from Grand Cayman, IOTA NA-016, until March 18. Activity is holiday style on 40 to 15 metres using mostly CW.

THIS WEEKEND ON THE RADIO. The Stew Perry Topband CW Challenge, North American RTTY Sprint, AWA John Rollins Memorial DX CW Contest, NCCC RTTY Sprint, QRP 80-Meter CW Fox Hunt, NCCC CW Sprint, SARL VHF/UHF Analogue/Digital Contest, RSGB Commonwealth Contest, SKCC Weekend CW Sprintathon, F9AA SSB Cup, South America 10 Meter Contest, AGCW QRP CW Contest, and Oklahoma QSO Party.

In addition, the EA PSK63 Contest, QCWA QSO Party, TESLA Memorial 80-Meter HF CW Contest, Idaho QSO Party, QRP ARCI Spring Thaw SSB Sprint, UBA Spring 2-Meter Contest, Wisconsin QSO Party and the WAB 3.5 MHz Phone will certainly keep contesters busy this weekend.

The 4 States QRP Group Second Sunday Sprint is scheduled for March 13. The QRP 40-Meter CW Fox Hunt, Phone Fray, CWops Mini-CWT Test and the RSGB 80-Meter Club CW Championship are all scheduled for March 15.

## WICEN News

Today was the Western Sydney walk for Alzheimer's Australia NSW. The next in the series of Memory Walk and Jog events – is the Sydney walk on May 7<sup>th</sup>, commencing at Leichhardt Oval #3, on the waterfront at Lilyfield. May 13<sup>th</sup> is the Hunter event at the northern end of Lake Macquarie and the 4<sup>th</sup> of June is at Westport Park in Port Macquarie. These are short events, and are suitable for new members.

Looking further ahead, the True Grit mud running event is on June 10 and 11 in Lower Portland, north-west of Sydney. Then on the 24<sup>th</sup> and 25<sup>th</sup> of June is Navshield, a major bush navigation event held somewhere in the "N-S-W" region. Ahead of this event there will be a recce and radio survey on Sunday 23<sup>rd</sup> of April.

Several training days are being planned. One is expected to be a day at Dural dedicated to a first aid qualification to satisfy the requirements of PUA21312. Please let WICEN know what dates are suitable for you to attend.

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.

WICEN Northern Rivers Region will be holding their Annual General Meeting on Sunday, April 9<sup>th</sup> at 10am. The venue is the Summerland ARC at 412 Richmond Hill Road, Richmond Hill. The weekly net is on Tuesdays at 8:00pm local time on the Lismore repeater VK2RSC on 146.8 MHz, which requires 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 weekend of April 1st and 2nd is the Canberra Two Day Walk. The website is [crarc.ampr.org](http://crarc.ampr.org).

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

## Club News

We start this week with news of a new club, on the North Coast of NSW.

Activity for the group centres on the Clarence River Valley, in the Grafton District.

Formed last year, the Clarence Valley Amateur Radio Group holds a monthly social meeting and a weekly net on the local 2 metre repeater, VK2RCV on 146.675Mhz, on Monday evenings.

The group took part last year in the Lighthouse and Lightship weekend at the Yamba Lighthouse and are planning to operate in this months John Moyle Field Day. So listen out for the groups callsign, VK2CLR.

*Advised by Brad VK2CEC*

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## **Westlakes Amateur Radio Club**

The club is holding their 8<sup>th</sup> annual car boot sale, on Saturday the 1<sup>st</sup> of April.

Its at the club grounds in York st, Teralba, starting around 8am.

Anything can be sold - as long as its legal!! - from pot plants, to tools, and even radio gear.

A BBQ, with hot and cold drinks will be available,

There's no cost to set up a stall, but bring your own table,

No entry cost, so don't be an April fool get there early for the bargains, all welcome.

*Barrie VK2QG*

*Vice president, Westlakes ARC*

## Oxley Region Amateur Radio Club

The next meeting of the Oxley Region Amateur Radio Club is the Friday night gathering at 7pm on Friday the 17<sup>th</sup> of March.

Club Station VK2BOR will participate in the John Moyle Memorial Field Day on Saturday and Sunday the 18<sup>th</sup> and 19<sup>th</sup> of March. The station will operate for the full 24 hours on all HF bands. The caravan will be located in the carpark at Sancrox Reserve, mid-way between Port Macquarie and Wauchope.

Congratulations to the three candidates who sat for the Advanced Licence last Sunday. They were all successful. The next training courses and assessments for the Advanced, Standard and Foundation licences will run when sufficient candidates have registered; contact the club via PO Box 712 Port Macquarie NSW 2444 as soon as possible, to register your interest.

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 sub-audible 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 January 2017 web edition of the club's bimonthly newsletter "Oxtales", along with past issues, can be viewed on the website, and lookout for the March edition, which will be published later this week.

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

## **Illawarra Amateur Radio Society**

The next meeting of the society is this Tuesday the 14<sup>th</sup> of March. The general meeting starts at 7:30pm, directly following the Society's Committee Meeting, which starts at 6:30pm.

Meetings are at the Coniston Community Hall, 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 will have a presentation from Brian VK2GCE on the designing and setting-up of a Home Theatre system. Brian presented this topic at the recent Central Coast Field Day, with those attending finding it most informative and interesting. Topics covered in his presentation include:

- What sounds do you WANT to hear?
- What sounds CAN you hear?
- What IS a sound system?
- What is a GOOD sound system?
- Basic Requirements
- and Do-It-Yourself Issues

Brian's presentations are always very good, with a thorough understanding of the topic, personal experience, along with detailed measurement and documented analysis.

Afterwards, raffle tickets will be available for purchase for the chance to win a full-featured soldering/desoldering station.

Listeners are advised that the VK2RUW Knights Hill repeater on 146.675MHz is currently off the air. In the last month, new antennas and feedline have been professionally installed to meet the requirements of the tower owners. Additionally, both the repeater itself and the duplexer have been refurbished and retuned. It is hope that re-installation of the repeater will occur within the next few weeks.

ARNSW News bulletins are presently relayed through two of the Illawarra Amateur Radio Society's VK2RMP repeaters at Maddens Plains, on 6 metres on 53.650MHz and on 2 metres on 146.850MHz. Both of these repeaters service Wollongong and much of Sydney.

The Society is presently trialling a Yaesu Fusion C4FM repeater on the VK2RMP 70 centimetre repeater on 438.725MHz at Maddens Plains. This 70 centimetre repeater operates with the usual 5MHz negative offset, with a 123Hz CTCSS access tone necessary for FM users. The repeater operates in Auto Mode, so analogue FM transmissions are retransmitted in FM and digital C4FM signals retransmitted in C4FM. Any users of this new digital mode are invited to make use of this UHF repeater on 438.725.

Additionally, if you're interested in having a bit of a chinwag on Saturday mornings, Steve VK2BGL runs a very popular net on the VK2RMP 2 metre repeater starting at 9.30am local. As this repeater is connected to Echolink, the Net gets call-ins from all over Australia as well as internationally.. So put the time of 9.30am in your diary & call-in next Saturday morning on the 146.850 repeater or on Echolink via VK2BGL-R.

To conclude, for a great evening of entertainment, fun and information, come along to the Illawarra Amateur Radio Society's next meeting at 7:30pm on March the 14th at the Coniston Community Hall.

*Submitted by Rob VK2MT*

*Publicity Officer for the Illawarra Amateur Radio Society*

## **Waverley Amateur Radio Society**

Today was the second annual Sydney Amateur Radio Ferry Contest, sponsored by the club. Hopefully, you were able to get out there and enjoy our beautiful Sydney Harbour.

The next monthly meeting is this Wednesday, March 15<sup>th</sup>. At this meeting, final planning for our annual excursion to Tooraweenah for the John Moyle weekend will be led by John VK2LWB. Also Eric VK2VE, will be giving a talk and demonstration on Soldering, which will include some on lead free soldering and why it's not such a scary thing. As always, tea, coffee and soft drinks are available during and after the meetings.

The next space special interest group get together is scheduled for this coming Tuesday, March 14<sup>th</sup>, from 7:00pm.

The next Project Day is scheduled for Saturday, April 1<sup>st</sup> and no, that's not an April fool's joke, commencing around 1:30pm usually running through to about 4:30 or 5:00pm. The next "Shack night", is on Wednesday, April 5<sup>th</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 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 as well.

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.

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 club runs regular Foundation course and assessment weekends. The next scheduled course and upgrade assessments for 2017, will be over the weekend of June 17<sup>th</sup> and 18<sup>th</sup>. To book and reserve your place, see our website, under Education and Training, for details.



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). It includes the capability to renew membership, purchase items such as Powerpole kits or book and pay for courses or assessments online. There is also an enquiry form on the webpage.

*73 from Eric VK2VE  
Broadcast Publicity Officer*

## Manly-Warringah Radio Society

This Wednesday is lecture night, so if you missed Geoff VK2AVR's talk about Web Software Defined Radios at the Wyong Field Day, you have a second chance! Geoff's talk will focus on the club's web SDR, a project that was sponsored by Amateur Radio New South Wales.

Next Wednesday, we'll have an extra, informal, lecture from Dom VK2JNA, who recently returned from an extensive trip through the Australian outback. The subject, perhaps not surprisingly, is Mobile HF operations in the outback. Dom kept in touch with the club while he was on (and off) the road, both with HF voice, and APRS. Come along and hear about the challenges he had.

And continuing the HF theme, the following Wednesday, the 29th, will be an HF Show and Tell night. If you have any interesting or unusual HF gear, bring it in and show it off! Radios, test gear, home brew, QRP, portable, interesting antennas, etc. If it's HF, bring it along!

Finally, 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, [mwrs.org.au](http://mwrs.org.au) and click on the WebSDR link in the top menu.

[direct link; [websdr.mwrs.org.au:8901](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 [mwrs.org.au](http://mwrs.org.au) for more information.

*73 Richard VK2SKY  
MWRS Publicity Officer*

## Hornsby and Districts Amateur Radio Club

The next meeting of the club is the informal mid-monthly meeting this Tuesday the 14<sup>th</sup> of March at the Mount Colah Community Centre, starting at 8:00pm. This is a discussion of all things radio, and beyond; or you can bring along an interesting device, or one you need guidance to use.

The Centre is near the northern end of Pierre Close, opposite the eastern entrance to Mount Colah Railway Station. Suitable buses are the 598 to Cowan Road, or the 595 stopping on the Highway.

The following meeting will be held on the 28<sup>th</sup>; Short show-and-tell presentations will replace the business meeting.

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 a dual mode FM - P25 repeater, located at Chatswood, on 438.350 MHz, with an LIPD-dodging -5.4 MHz offset; meaning users transmit on 432.950 MHz. A 91.5 HZ tone or the default NAC of 293 is required for access.

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;**

### **March**

HADARC Mid-monthly meeting on the 14<sup>th</sup>  
Manly-Warringah lecture night on the 15<sup>th</sup>  
Oxley Region Amateur Radio Club gathering on the 17<sup>th</sup>  
ARNSW Council nominations close on the 18<sup>th</sup>  
John Moyle Field Day Contest also, on the 18<sup>th</sup> and 19<sup>th</sup>  
Manly-Warringah special lecture night on the 22<sup>nd</sup>  
HADARC Monthly Meeting on the 28<sup>th</sup>  
Manly-Warringah HF Show and Tell night on the 29<sup>th</sup>

### **April**

Waverley ARS Project Day on the 1<sup>st</sup>  
Westlakes ARC Car boot sale, also on the 1<sup>st</sup>  
St George ARS Meeting at Connells Point on the 5<sup>th</sup>  
Waverley ARS Shack night, also on the 5<sup>th</sup>  
WICEN Northern Rivers AGM on the 9<sup>th</sup>  
Hunter Radio Group meeting on the 14<sup>th</sup>  
Urunga Convention on the weekend of the 15<sup>th</sup> and 16<sup>th</sup>  
Manly-Warringah lecture on the 19<sup>th</sup>  
ANZAC day is the 25<sup>th</sup>  
ARNSW AGM on the 29<sup>th</sup>

### **May**

ARNSW Foundation weekend, 13<sup>th</sup> and 14<sup>th</sup>  
Manly-Warringah lecture on the 17<sup>th</sup>  
St. George Foundation weekend, 20<sup>th</sup> and 21<sup>st</sup>  
Manly-Warringah theme night – Microphones - ends the month, on the 31<sup>st</sup>