

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

Last weekend, ARNSW conducted the first Foundation and assessment weekend from the new provider - the AMC. There were 8 candidates for the Foundation and 4 upgrades. Under the new arrangements the candidates have to wait to be advised their results. The next ARNSW Foundation weekend is scheduled for the 13<sup>th</sup> and 14<sup>th</sup> of July; bookings close on Friday the 28<sup>th</sup> of June.

Next Sunday the 26<sup>th</sup>, is a big day at VK2WI Dural; along with the usual bi-monthly Trash and Treasure day, we will be welcoming delegates on the final day of the WIA Conference being held in Sydney.

There will be some changes to the normal arrangements on the day; with the increased number of attendees at Dural, visitors are asked to park as directed within the property. Delegates will be coming by bus so there is no parking within the driveway turning circle. Most of the area between the Centenary Building and the road and behind the building is available as normal and the **whole** area to the east of the VK2WI building. Parking is discouraged in Quarry Road due to the restricted visibility on the narrow road. Boot sellers will be fitted in, within the parking areas.

The Trash and Treasure will follow the usual format with a table outside for those early attendees looking for bargains until the Building is opened about 9 am. The inside store opens later, as normal. The WIA delegates are scheduled to arrive round 10 am. The VK2WI news bulletin starts as usual at 10am with National News, then after National news at around 10:25, we will cross to a live presentation on VK2WI with some of the conference delegates. After that, at about 10:40am the news continues with some shortened local content and club news, followed by the usual callbacks. Regular contributors are asked to submit their usual items; and the evening bulletin will carry full reports as usual. All normal frequencies and relays will be used, together with the streaming service, available at <http://arnsw.org.au/audio>.

The day will feature displays from several local clubs and groups, in the new grassed area in front of the Centenary Building. Inside, there will be several presentations as part of the WIA Conference weekend. The Conference bus

will leave around 2pm, taking delegates to their final location at Rose Bay; as this weekend also coincides with the centenary celebration of the Waverley Amateur Radio Society Centenary.

In place of the usual BBQ provided on T & T days there will instead be a catered lunch, at a slightly later time; around noon. Visitors to the usual radio experimenters Group meeting, are encouraged to come and display their projects at the group's table, and show off their creations to visiting delegates.

With so many new faces at VK2WI next Sunday, all attendees are asked to wear a name badge; either ARNSW or your club's, for easier introductions. On site there will be the usual facilities for renewing ARNSW memberships, applying for membership, ordering a membership badge or inquiring about the Foundation and upgrade weekends..

So mark up your calendar for next Sunday, the 26th May for the activities at VK2WI Dural.

## Activities at the 2019 WIA Conference and AGM

The Sunday Afternoon display as VK2WI are just one part of the activities at this year's WIA Conference and AGM being held in Sydney, from Friday the 24<sup>th</sup> to Sunday the 26<sup>th</sup> of May. You don't have to be a WIA member to attend and participate in the activities.

On the evening of Friday the 24<sup>th</sup>, the Waverley Amateur Radio Society celebrates its 100<sup>th</sup> anniversary in the historic Marconi Room of Sydney Town Hall, with keynote speaker David Dufty, author of the Australian "Secret Code Breakers".

Saturday's program includes the short formal AGM, followed by an open Forum, technical presentations, discussions and reports. This is an opportunity to influence the direction of Amateur Radio in Australia.

Saturday night's Conference Dinner is at Sydney's Parkroyal Hotel, with renowned keynote speaker Professor Fred Watson, astronomer extraordinaire, whose father was an amateur radio operator.

The conference coincides with the start of Vivid Sydney – now in its tenth year. You can still register; visit the website, at [www.wia.org.au](http://www.wia.org.au) under the WIA Information tab, or search for WIA 2019 Annual Conference.

Billeting arrangements are being co-ordinated by the Waverley Amateur Radio Society; if you are a Sydney amateur with a spare bed or two, or if you are planning to attend the conference and are looking for a low cost accommodation option; you can find all the details on the Waverley Amateur Radio Society web site, at [vk2bv.org](http://vk2bv.org). There is a link to the billeting information on the home page.

## US Licence Exams

The Oz-VE group will again run US licence exams in Sydney, in the lead-up to the WIA AGM.

There are two sessions – on Thursday 23rd May, from 6:30pm at Engadine McDonalds; and Friday 24th, at 11:30 am at McDonalds in St Peters, on the corner of Princess Hwy and Bishop Street. Both a reasonable walk from railway stations of the same name, and St Peters is a short taxi-ride from the airport.

Many training resources and practice exams can be found online, a good place to start is at: [hamtestonline.com](http://hamtestonline.com).

For more information about Oz-VE, or to book a seat at upcoming exams, please make contact via the website, at: [veexams.com](http://veexams.com).

*Submitted by Julian VK2YJS, and AG6LE (VE).*

## Changes to... the charge of an electron.

As scientists get more accurate in their measurement of nature, standards sometimes need to be redefined.

Six months ago, a meeting of scientific delegates from around the world, voted to change the definition of a kilogram. This new definition, changed the unit of mass, from being based, literally, on a certain chunk of metal, which we all agree to call “exactly one kilo”, to a definition based on electromagnetic measurement. The advantage of this change, is that the standard can be reproduced exactly by different scientists, and it is based on fundamental laws of physics – so as our measurement technology improves, so does the accuracy of our standards.

As part of this process, however, there are some flow-on changes. One is that the definition of the charge of the electron, has to change.

The current value of the electron charge is 1.602 176 6208 by 10 to the minus 19 Coulombs.

But from tomorrow, 20<sup>th</sup> May 2019, the value will change to 1.602 176 6340 by 10 to the minus 19 Coulombs.

Will this increase in charge affect how quickly electrons can vibrate and so change the frequency of our oscillators? Will we need to retune our antennas for a better VSWR? We will have to wait and see.

*73 de Peter VK2EMU  
Coordinator, ARNSW Radio Experimenters Group*

## Weekly Solar and Geophysical Report

For the period of the 10<sup>th</sup> to the 16<sup>th</sup> of May.

First, the summary;

Dates across the columns are	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	13 <sup>th</sup>	14 <sup>th</sup>	15 <sup>th</sup>	16 <sup>th</sup>
10cm flux	76	78	76	75	74	74	74
Fredericksburg Index (Afr)	7	19	5	5	23	8	11 estimated
Australian Index (Aaus)	5	8	0	3	4	0	4 estimated
T index	-1	0	-5	-3	+4	+1	0

Solar activity was very low from the 10<sup>th</sup> to the 14<sup>th</sup>, low on the 15<sup>th</sup> and very low again, on the 16<sup>th</sup>.

Geomagnetic activity was mostly quiet on the 10<sup>th</sup>, quiet to active on the 11<sup>th</sup>, and quiet on the 12<sup>th</sup> and 13<sup>th</sup>. Quiet to minor storm conditions were observed on the 14<sup>th</sup>, though the 15<sup>th</sup> and 16<sup>th</sup> returned to quiet levels.

F2 critical frequencies in the southern Australian region remained near predicted during local daylight hours, all week. However, some enhanced conditions were observed at night; 40% on the 10<sup>th</sup>, 45% on the 11<sup>th</sup>, 35% on the 12<sup>th</sup>, 20% on the 13<sup>th</sup>, which continued with 30% enhancement after local dawn; and 20% on the 14<sup>th</sup>, which also saw enhancement, of 20%, after local dawn.

Now, the forecast for the 17<sup>th</sup> to the 23<sup>rd</sup> of May;

Solar activity is expected to be low.

Geomagnetic activity is expected to be at quiet to unsettled levels.

Maximum Usable Frequencies are expected to be 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.

Having finished April, the figures were;

Minimum of 67, Average of 73, and a Maximum of 79  
With peak dates from the 7<sup>th</sup> to the 20<sup>th</sup>

So far in May, we have a;

Minimum of 67, Average of 72, and a Maximum of 79  
With peak dates from the 6<sup>th</sup> to the 19<sup>th</sup>

And looking ahead to the prediction for June, we are expecting a;

Minimum of 67, Average of 72, and a Maximum of 77  
With peak dates from the 2<sup>nd</sup> to the 13<sup>th</sup>, and the 28<sup>th</sup> to the 30<sup>th</sup>.

*Update with thanks to Noel, VK2FUL.*

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

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## What use is an F-call?

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

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*Duration: 2m57s*

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

*Out: "I'm Onno vk6flab"*

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

## **ARRL DX news**

CUBA; Members of the Grupo Especial de Expediciones y Concursos are active as T43A until May 20 to celebrate the club's first anniversary. Activity is on 80 to 10 metres using CW, SSB and FT8.

LIBERIA; Dickson, EL2DT has been active on 20 metres using CW around 1830UTC.

WALLIS AND FUTUNA ISLANDS; Nobby, G0VJG is active as FW5JG from Wallis Island, IOTA OC-054, until May 22. Activity is on 40 to 10 metres using SSB and FT8. This includes the possibility of a short side trip to Futuna Island, IOTA OC-118.

REUNION ISLAND; Thomas, F4HPX is active as FR/F4HPX from Saint Denis until June 5. Activity is holiday style on 40, 20 and 15 metres using SSB, FT8 and some CW.

ENGLAND; Members of the Tynemouth Amateur Radio Club are active as GS0NWM from Mull until May 24. Activity is on the HF bands using CW, SSB, RTTY and FT8 in DXpedition mode, with up to four stations active. This includes Satellite activity as well.

JERSEY; Operators ON5HC, ON7PQ, ON4KZ, ON5DZ and ON8AZ plan to be active as MJ/OQ7A/p from the Minkies Islands, IOTA EU-099, from May 25 to 31. Activity will be on 80 to 10 metres using CW, SSB and various digital modes.

ALASKA; Henry, NL0H is active as NL0H/p from St. Lawrence Island, IOTA NA-040, until May 19. Activity is on 30 and 20 metres using SSB and FT8.

NORWAY; Waldi, SP7IDX is active as LA/SP7IDX from Store Molla, Lofoten Islands, IOTA EU-076, until May 29. Activity is on 40 to 10 metres using SSB and FT8.

ARUBA; Operators Ben, DL6RAI, Martin, DL5RMH and Philipp, DK6SP will be active as P4/DL6RAI, P4/DL5RMH and P4/DK6SP, respectively, until May 29. Activity will be on 160 to 6 metres using CW, SSB and possibly digital modes.

GREECE; Laci, HA0HW will be active as SW8WW from Thassos Island, IOTA EU-174, from May 23 to June 5. Activity will be on 40 to 6 metres using mainly CW, with some SSB, RTTY and PSK. This includes an entry in the upcoming CQ World Wide WPX CW contest.

PALAU; Operators JM1LRA, JI6IHG and JA7WFT are active as T88TA, T88IH and T88FT, respectively, from Koror Island, IOTA OC-009, until May 24. Activity is on the HF bands and 6 metres using CW, SSB and various digital modes.

TURKS AND CAICOS ISLANDS; Operators K2SX, K4BAI, K4QPL and KK4R will be active as VP5/homecalls from Harbour Rock Villa on Providenciales Island, IOTA NA-002, from May 21 to 28. Activity will be on 160 to 10 metres using CW, SSB and various digital modes.

CAMBODIA; Franco, IU0CRW is active as XU7AKP while working in Siem Reap. Activity is on 80 to 10 metres using CW and SSB.

ROMANIA; Members of the YO6KNE radio club are active with special event callsign YR19PFS until June 15 to commemorate the visit to Romania of Pope Francis.

THIS WEEKEND ON THE RADIO. The NCCC RTTY Sprint, NCCC Sprint, UN DX Contest, NZART 80-Metre CW Sangster Shield Contest, Portuguese Navy Day Contest, His Majesty King of Spain CW Contest, EU PSK DX Contest, Aegean RTTY Contest, Feld Hell Sprint and the Baltic 80-Metre Contest are all on this weekend.

The Run for the Bacon QRP Contest is scheduled for May 20.

The CWops Mini-CWT Test, RSGB Club 80-Metre Data Championship, SKCC CW Sprint and Phone Fray are scheduled for May 22.

The Canadian National Parks on the Air, CNPOTA, event runs throughout 2019, with special stations active from Canada's parks and historic sites.

## WICEN News

The final Dementia Australia, Memory Walk and Jog event in New south wales, was this morning, in Sydney at Leichhardt Oval #3 Lilyfield. However, WICEN NSW is also be providing assistance for some events in Brisbane, at the South Bank Cultural Forecourt on 26 May; and Kawana Surf Club on the Sunshine Coast on 9 June.

True Grit is an obstacle course running event, scheduled for the 1<sup>st</sup> and 2<sup>nd</sup> of June, and the OCR World Championship 24 hour is on the 8<sup>th</sup> and 9<sup>th</sup> of June. Both events are at Lower Portland, in outer NW Sydney. Nic VK2KXN is event commander for both of these events; let him know via email, [mcleannb@bigpond.com](mailto:mcleannb@bigpond.com) if you are available for either or both.

The Glow Worm Marathon is at Newnes, on June 15<sup>th</sup> and 16<sup>th</sup>.

The BSAR Navshield is a bush navigation contest, on the 22<sup>nd</sup> and 23<sup>rd</sup> of June, held at a location somewhere in the greater Sydney region. As well as providing support and safety for the the event, WICEN may enter a team, subject to interest.

Due to the number of events in June, there will be no training at Dural.

The WICEN website is at [nsw.wicen.org.au](http://nsw.wicen.org.au) and includes a web contact form. Members can log in and update personal details online. Facebook users will find an official WICEN NSW page, and an informal national WICEN group.

The WICEN Mid North Coast Region meets at 3:30pm on the first Saturday of the month, at SES HQ, Central Road, Port Macquarie. The region is also running an HF net on Thursday evenings from 7pm, on the band-plan's 80 metre WICEN frequency of 3.6MHz.

WICEN ACT is part of the Canberra Region Amateur Radio Club, supporting events in the ACT and Capital Country, and on the South Coast of NSW. The SCSCC Bega Rally is on June 8<sup>th</sup> & 9<sup>th</sup>, and the NSSCC "Rally of the Bay" at Bateman's Bay is on the 29<sup>th</sup>. August 6<sup>th</sup> is the BMSC Narooma Rally. For more information, see the WICEN and Events pages on [www.crarc.ampr.org](http://www.crarc.ampr.org).

WICEN Victoria will be supporting the Eureka Rally on August 24<sup>th</sup> and 25<sup>th</sup>, which is around Ballarat. The weekly net is on each Tuesday at 8:30 to 9:30 pm, on 3.6MHz. More information on WICEN Victoria's, including a report on Duncan's Run, is on the website, [vic.wicen.org.au](http://vic.wicen.org.au).

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## Club News

We start this week, with news from the Oxley Region Amateur Radio Club. The next meeting is June monthly general meeting, at 2pm on Saturday the 1<sup>st</sup> of June, in the SES Building, Central Road, Port Macquarie.

The VK2RPM 2 Metre repeater is currently on test, operating on 147.0MHz with 91.5Hz CTCSS, until Saturday the 25<sup>th</sup> of May. Echolink continues to be available on VK2RPM, but it is on 147.0MHz. During this test, the repeater on 146.7 MHz will be off the air, but will return once testing is completed. VK2RCN on 147.0MHz at Telegraph point remains on air, but requires 123 Hz CTCSS for access.

It's now only three weeks until the Club's 44<sup>th</sup> annual Field Day at the Wauchope showground hall, on Saturday and Sunday the 8<sup>th</sup> and 9<sup>th</sup> of June, during the Queen's Birthday long weekend. All of the usual field day activities will be there; remember to bring your projects for the home brew display, and there will be foxhunts on 2 and 80 metres, on both days. The Field Day dinner will be at Port Macquarie Golf Club on the Saturday night; mark your calendar now. Wauchope showground permits camping, so you can stay on site in your own motor home, caravan or tent, with power and amenities. Please book ahead, as Port Macquarie and Wauchope are very popular holiday destinations for the June Long Weekend.

Candidates for the Foundation, Standard and Advanced Licences should contact the club via PO Box 712 Port Macquarie NSW 2444 regarding training and assessments; the first assessments under the new arrangements will be held soon.

The club conducts two nets each week; the mid-week net starts at 7:30pm on Thursday nights, and the weekend net starts at 9am on Sunday mornings. Both nets are on the VK2RPM 2 metre repeater, currently testing on 147.0MHz, which requires a 91.5Hz sub-audible tone for access.

Visitors are always made very welcome at the club's monthly general meetings at 2pm on the first Saturday of each month, and at the Friday night gathering at 7pm on the evening of the third Friday of each month. The venue for all these 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). The site contains a wealth of Amateur Radio items in addition to club information. The May 2019 issue of the club's bimonthly newsletter, Oxtales, is now online, and past issues are available on the website as well. The club is also on Facebook; just search for ORARC.

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

## Central Coast Amateur Radio Club

Details of yesterday's lecture on surface mount soldering (and all its fun and games) will appear next week. In the meantime, the Club has gained a somewhat large satellite dish, so visitors can expect to see a new landmark on the horizon soon; further details will appear in later broadcasts, but it is promised that the local residents will not be turned into shape-shifting lizards, as the dish is receive-only.

The next Central Coast WICEN meeting will be on 8<sup>th</sup> June, at the usual bat-time and bat-channel, ie. the second Saturday of every even-numbered month.

All meetings of the Central Coast Amateur Radio Club are held at the Clubrooms in Dandaloo St, Kariong, just past the fire station. Meetings start at 1pm, preceded by the famous sausage sizzle run by master chef Steve VK2SKC, from noon, followed by Karen VK2AKB's yummy pikelets.

The Clubrooms are accessible by bus, with a stop just opposite Dandaloo St, serviced by the route 34 bus from Gosford railway station every hour; and one can usually arrange a lift back. The Clubrooms are usually open from 10.30am on Saturday, for general chit-chat and access to the Club workshop and library.

The Club also conducts Foundation training on an as-required basis, and a new course is coming up soon, once details of the new licencing arrangements are finalised.

The Club relays VK2WI News every Sunday morning and evening. Callbacks are taken after the morning news only, on the Somersby 6 and 2m repeaters VK2RAG on 53.725 and 146.725 MHz respectively; both repeaters require the standard sub-audible tone of 91.5 Hz.

The Club also runs a mixed-mode repeater VK2RAG on 439.950 MHz, which is connected to the P25 network; a 91.5 Hz tone is required for analogue access, and highly recommended for receiving. Also, both IRLP and EchoLink will be available soon.

There is a net every Thursday from 8pm, on the 2m repeater VK2RAG on 146.725; all members are encouraged to join (especially if Club news for the ARNSW broadcast is involved). There is also an experimental HF net on 80m, but as it is difficult to find a free frequency, the frequency will be announced on the VHF net prior. Club news is happily accepted at [publicity@ccarc.org.au](mailto:publicity@ccarc.org.au), preferably by noon on Friday. Listeners may “join” the net by email to [netmaster@ccarc.org.au](mailto:netmaster@ccarc.org.au) and their comments will be read out.

The Club also has a Facebook page: look for “centralcoastarc” and be sure to “like” it to receive further updates. There is also a Twitter account on @ccarclub [“At CC AR Club”], and a YouTube channel of the weekly streaming world-wide news via several modes which is proving to be quite popular, especially with Amateurs both interstate and overseas.

Further information about the Central Coast Amateur Radio Club can be found on the website, [www.ccarc.org.au](http://www.ccarc.org.au).

*Dave VK2KFU*

*Publicity Officer, Central Coast Amateur Radio Club.*

## **Blue Mountains Amateur Radio Club**

The Club meets on the first Friday night of each month, excluding January; at the former Scout Hall, 4 Moore Street Glenbrook; behind the sports Oval. The next meeting is on Friday the 7<sup>th</sup> of June; all are most welcome.

Club activities include weekly Nets on HF and two metres, Tech talks, show-and-tell, Guest Speakers, Field Days, JOTA, project and antenna Building, and of course, a good old chin-wag.

We are also running training in Radio and Electronics theory, on Thursday nights from 7pm. The classes are suitable for those planning to take either Standard or Advanced Licence Exams.

On the 10<sup>th</sup> and 11<sup>th</sup> of August, the Club will be holding a Foundation training weekend at Glenbrook; for any enquiries regarding training and assessments at BMARC, please email [education@bmarc.org](mailto:education@bmarc.org).

*Steven VK2TSG*

*Vice-President, Blue Mountains Amateur Radio Club.*

## St. George Amateur Radio Society

The next gathering of the Society is on Wednesday evening, the 1st of June.

At this gathering there will be a presentation on Digital Mobile Radio, or DMR. With 5 repeaters in the Sydney area and over 30 Australia wide, the DMR network is more easily accessible than ever before.

For those new to DMR, Paul VK2GX will be covering time slots, repeater coverage, available equipment and getting started. Learn about code plugs and the basics of DMR programming, including the relationship between contacts, talk groups, receive groups, zones and scan lists, plus available programming and cloning software.

The presentation will also look at the popular DMRplus network, providing easy access to talk groups and group repeater reflectors worldwide. DMR Plus also supports connectivity via the DV4mini, DVMEGA and OpenSpot devices.

At the meeting, there will be the opportunity to buy a ticket in a raffle for a GD-77 DMR handheld transceiver, which will do both DMR and FM.

There will be the usual refreshments; All members, local amateurs and others interested are invited to attend.

The meeting rooms are at Donnelly Park, Kyle Parade, Connells Point – near South Hurstville, and the gathering starts at 7.30pm on Wednesday 1st June.

The “What Three Words” address for the club is “torch bath frosted”.  
[\[http://map.what3words.com/torch.bath.frosted\]](http://map.what3words.com/torch.bath.frosted)

*Advised by Peter VK2EMU  
for the St George Amateur Radio Society.*

## Hornsby and Districts Amateur Radio Club

The next meeting of the Club is the AGM, coming up on the 28<sup>th</sup> of May. It is at Mt Colah Community Centre, near the northern end of Pierre Close, opposite the eastern entrance of Mt Colah Station.

The Club runs three nets each week, including on public holidays. Monday's net starts at 8pm on the VK2RNS 2 metre repeater, 147.250MHz No tone is required, but a 91.5 Hz tone is sent. The 80 metre net is on Wednesday evenings on 3608.5 kHz, also from 8pm, and Morning Tea with HADARC is on or near 7106 kHz from 9am on Fridays.

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, and on twitter, @VK2MA.

*Submitted by Julian VK2YJS  
HADARC Publicity Officer.*

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## **Summary of coming events;**

### **May**

WIA AGM and Conference in Sydney, 24<sup>th</sup> to the 26<sup>th</sup>  
ARNSW Trash & Treasure and Radio Experimenters Group on the 26<sup>th</sup>  
Westlakes ARC open day and boot sale on the 26<sup>th</sup>  
HADARC AGM on the 28<sup>th</sup>  
Manly-Warringah show and tell night on the 29<sup>th</sup>

### **June**

SGARS Gathering on the 1<sup>st</sup>  
Oxley Region ARC monthly meeting on the 1<sup>st</sup>  
BMARC Working bee at Glenbrook on the 1<sup>st</sup>  
BMARC Monthly meeting on the 7<sup>th</sup>  
ORARC Field Day, Wauchope showground hall on the 8<sup>th</sup> and 9<sup>th</sup>  
Bookings for ARNSW July Foundation course close on the 28<sup>th</sup>

### **July**

Blue Mountains ARC Monthly meeting on the 5<sup>th</sup>  
BMARC Buy and Sell day at Glenbrook on the 7<sup>th</sup>  
BMARC visit the Kurrajong Radio Museum on the 15<sup>th</sup>  
ARNSW Foundation and licence assessment weekend, 13<sup>th</sup> and 14<sup>th</sup>  
ARNSW Trash & Treasure and Radio Experimenters Group on the 28<sup>th</sup>