

Silent Key.

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

Malcolm Sinclair, VK2BMS of Willoughby East, passed away on the evening of 11th September 2016.

Mal was a regular on 20m, talking to old friends in New Zealand - he originally held the call ZL2BAA. He also had regular contacts on 80m and participated in the ARNSW callbacks each Sunday morning. He enjoyed the trash and treasure and home brew group meetings at Dural.

Mal died at home and had contacts right up to the day he passed.

His dry wit, friendly and caring nature will be missed by his many friends.

Please pause with us, while we remember Mal.

[pause 5 seconds]

Vale [va-LAY] Malcolm Sinclair VK2BMS.

Advised by Peter VK2TPM

[Play Evening ID1]

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

Today concludes the ARNSW Foundation course for September. Places are filling fast for the November course on the weekend of the 19th and 20th. Bookings can be made by email, to education@arnsw.org.au for either the Foundation course or upgrade assessments. November is our last course for the year – but the next will be in January.

The ARNSW licence upgrade course will conclude in a few weeks time. The course will run again in 2017 and is likely to start in March. Enquires are welcome by email, to the same address.

The Waverley Amateur Radio Society, has a foundation course running next weekend.

The September Trash & Treasure at ARNSW Dural will be on next Sunday the 25th. There are some bookshelves, two-ring folders and radio magazines surplus to requirements, available at the event. The Trash & Treasure is also an opportunity for the payment of membership, membership applications, or to order a membership badge; Look for Membership Officer Bob VK2CAN.

The 23 cm repeater transmitter developed a fault in its final stage and is out of service while a replacement module is obtained and fitted.

With three months of this year left, the final quarter broadcast roster is currently being prepared. Anyone who would like to assist should contact John VK2JV who looks after the roster.

ARNSW Radio Homebrew and Experimenters Group

The next bi-monthly meeting of the group is a next week, Sunday the 25th, after the next Trash and Treasure. It's at the usual location – here at VK2WI, 63 Quarry Rd Dural.

At the last meeting, Mark VK2XOF gave a presentation about Spectrum Analysers, what they do and how they operate; This time Kevin VK2KVJ will be following up with a presentation of his homebrewed spectrum analyser that works up to the UHF region. It will be a detailed talk about the design and construction of the project.

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.

All are welcome – noon on Sunday the 25th of September at 63 Quarry Rd Dural.

Advised by Peter VK2EMU

Coordinator, ARNSW Radio Homebrew and Experimenters Group

Weekly Solar and Geophysical Report

For the period of the 9th to the 15th of September.
First, the summary;

Dates across the columns are	9 th	10 th	11 th	12 th	13 th	14 th	15 th
10cm flux	91	93	86	87	86	85	84
Fredericksburg Index (Afr)	6	4	3	6	3	8	7 estimated
Australian Index (Aaus)	1	1	2	4	2	6	4 estimated
T index	34	39	35	46	45	36	44

Solar flare activity was very low all week.

Geomagnetic activity observed for the Australian region, was quiet all week except for some unsettled conditions on the 14th.

F2 critical frequencies in the southern Australian region were near predicted monthly values on the 9th and 10th. Local night on the 11th saw depressions of 20%, and local night on 12th saw depressions of 15% - but with daytime frequencies near predicted. Then from the 13th to 15th, frequencies returned to near predicted monthly values.

Now, the forecast for the 16th to the 22nd of September;

Solar flare activity should remain very low to low.

Geomagnetic conditions are expected to be quiet to unsettled but coronal hole effects may cause brief active conditions.

Maximum Usable Frequencies should be near predicted monthly values.

Data courtesy of Space Weather Services.

Space Weather Summary for August 2016

Complied with data courtesy of Space Weather Services

Solar Activity in August was even lower overall than the previous month. Except for the 7th of August, where activity reached moderate levels, the whole month was between Very Low to Low levels of solar activity. A single significant flare was recorded – an M1.3 flare, on the 7th. No X-class flares were recorded.

Looking now at Ionospheric activity, the downward trend continues. The deepest global ionospheric depression for the month was observed on the 4th of August in the Southern Australian region – it was associated with coronal hole induced geomagnetic activity. This resulted in Southern Region Maximum Usable Frequencies, or MUFs, being depressed by 30% from the predicted monthly values.

Geomagnetic Activity for the month, again was pretty quiet. The strongest and only significant disturbance for the month, was observed on the 3rd of August with a local A index of 31 – which is classified as a Minor Storm level. This activity was associated with the Earth's entry into a high-speed solar wind stream, induced by a large positive polarity equatorial coronal hole.

Question time: the 10cm Flux; what is it?

You have probably heard of the Solar flux, or 10cm flux. We even provide updates on monthly values here on VK2WI News. on the Solar Flux But what's it all about?

Historically, activity of the sun was estimated by observation of sunspots; literally, by photographic or direct observation of the solar disk, counting the dark regions. This is a laborious and potentially error prone process, but there is a great deal of historic data for this particular measurement.

As we learned more about the sun, we found out that sunspots are localised cool spots, caused by disturbances in the sun's magnetic field. That led the way to measuring solar activity by electromagnetic means, and it's where the 10 centimetre flux comes in.

The 10cm flux is the radio power of the sun at a wavelength of 10.7cm, that is, a frequency of 2800MHz. Measuring the strength of this 'signal' from the

sun is a good indicator of solar activity – and probably less time consuming than counting the sunspots. There is even a constant and well-defined relationship between the 10cm Flux and the Sunspot number. So in modern times, 10cm flux is widely used in place of the sunspot number, as a measure of sunspot activity.

The reference values for 10cm flux are measured by the Penticton radio observatory in Canada. Unlike the sunspot number, the 10cm flux never drops to zero, even during solar minimum. When no sunspots visible on the solar disk, the 10cm flux will still have a value of around 67. The unit of measure, is a special unit called, perhaps unsurprisingly, Solar Flux Units.

For the definition of solar flux units, how they compare with sunspot units, and a whole lot more data about space weather and solar measurement, visit the Space Weather Services website – its www.sws.bom.gov.au.

[Play Evening ID2]

ARRL DX news

MAURITIUS, 3B8. Bernie, ZS4TX is active as 3B8TX until September 19. Activity is primarily on 6 metres EME. QSL direct to home call.

UGANDA, 5X. Andy, DL3YM will be active as 5X8B from Entebbe from September 20 to October 1 while on a work assignment. Activity will be in his spare time from the campus of the Nkumba University in Entebbe on the HF bands using mostly CW with some SSB occasionally for demonstration purposes. QSL to home call.

CUBA, CO. Gab, HA3JB will be active as T42CH from Havana from September 20 to 25. Activity will be on the HF bands using CW, SSB and RTTY. QSL to home call.

CAPE VERDE, D4. Ralf, DK8FA is active as D44TUJ from Boa Vista, IOTA AF-086, until September 28 while on holiday. Activity is mainly on 20 and 17 metres using digital modes. QSL to home call.

COMOROS, D6. A group of operators will be active as D66D until September 30. Activity will be on 160 to 10 metres using CW, SSB and RTTY. QSL via OK6DJ.

BOSNIA-HERZEGOVINA, E7. Special event station E703QLA is active until November 15 to draw attention to the 3rd Quarry Life Award, an international research contest concerning the biodiversity in quarries. Activity is on 80 to 10 metres using CW, SSB and RTTY. QSL via bureau.

ST. PIERRE ET MIQUELON, FP. Freddy, F4HEC, Nicolas, F1RAF, Michel, FK8IK and Laurent, F5TMJ are active as TO5FP until September 20. Activity is on 80 to 10 metres using CW, SSB and RTTY. QSL via operators instructions.

ISLE OF MAN, GD. John, GW4SKA is active as GD4SKA until September 21. Activity is on HF bands using mostly RTTY. This includes being active as GD0A in the BARTG Sprint 75 contest. QSL via M0OXO.

OGASAWARA ISLANDS, JD1. Take, JA1UII will be active as JD1BON from September 22 to October 1. Activity will be on 80 to 6 metres using CW, SSB and RTTY with an entry in the upcoming CQ World Wide RTTY contest. QSL via operator's instructions.

SVALBARD, JW. Helge, LB5WB is active as JW/LB5WB from Spitsbergen Island, IOTA EU-026, until September 19. This includes an entry in the Scandinavian Activity CW Contest. QSL to home call.

BELGIUM, ON. Lions Clubs International Belgian Amateur Radio operators are active as OR100LCI until March 2017 to mark its 100th anniversary. Activity is on the HF bands using CW, SSB and RTTY. QSL via ON8ZL.

FAROE ISLANDS, OY. A group of operators are active as OY/ON6NB until September 21. Activity is on 80 to 6 metres using CW, RTTY and PSK. QSL via M0URX.

GREECE, SV. Mek, SQ3RX will be active as SV8/SQ3RX from Corfu, IOTA EU-052, until September 19. Activity will be on 40 to 10 metres using mostly CW, with some SSB and RTTY. QSL to home call.

MICRONESIA, V6. Susumu, JA6REX and Toshiya, JH6HZH will be active as V633KS and V633ZH, respectively, from Chuuk Island, IOTA OC-011, from September 19 to 25. Activity will be on 80 to 6 metres using CW, SSB and RTTY. QSL to home calls.

LORD HOWE ISLAND, VK9L. Les, NI1L will be active as VK9LN from September 20 to 27. Activity will be holiday style on 40 to 10 metres using mostly CW with some RTTY and PSK. QSL to home call.

LAOS, XW. Bruce, 3W3B will be active as XW4XR from Vientiane from September 19 to 30. Activity will be on 80 to 10 metres using CW, RTTY and JT65. QSL via E21EIC.

ALBANIA, ZA. After his Corfu activity, Mek, SQ3RX will be active as ZA/SQ3RX from Sarande and Tirana from September 19 to 25. Activity will be on 40 to 10 metres using mostly CW, with some SSB and RTTY. QSL to home call.

THIS WEEKEND ON THE RADIO. ARRL 10 GHz and Up Contest, All Africa International DX Contest, North American RTTY Sprint, NCCC RTTY Sprint, NCCC CW Sprint, AGB NEMIGA 80-Meter Contest, SARL VHF/UHF Analogue/Digital Contest, Scandinavian Activity CW Contest, New Hampshire QSO Party, New Jersey QSO Party, Washington State Salmon

Run, QRP Afield, Feld Hell Sprint and the BARTG Sprint 75 will certainly keep testers busy this upcoming weekend.

The Run for the Bacon QRP CW Contest and 144 MHz Fall Sprint are scheduled for September 19.

The Phone Fray and CWops Mini-CWT Test are scheduled for September 21.

The ARRL National Parks on the Air event continues throughout 2016 to mark the 100th anniversary of the United States' National Park Service.

WICEN News

SAREX, the search and rescue exercise built around the search for the single-engined aircraft, VH-MDX, concludes today in the Barrington Tops.

Coming up on the 9th of October, is another training day, here at VK2WI Dural.

The Hawkesbury Canoe Classic, a significant event in terms of the number of operators required, will run overnight from Saturday, October 29th to Sunday 30th. Positions are available at on-shore and mid-river checkpoints, on shut-down vessels, at Finish, and at SES HQ at Seven Hills.

The new WICEN 70cm DMR repeater, VK2RRW, is now on-air in Sydney on 438.1MHz. Its connected to the global DMARC system and further details are on the website, at dmr-marc.net.

The WICEN New South Wales website, at nsw.wicen.org.au - includes contact details, a webform and membership information. WICEN has a twitter account: @wicennsw. Facebook users will find the official WICEN NSW page, and an informal national WICEN group.

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. Coming events include Fitz's Challenge, a road cycling event in the Brindabella Ranges, on Sunday October 30. Saturday the 3rd of December is the BMSC Rallye des Femme.

WICEN Victoria's next event is the Stockman Rally in the Big River State Forest on September 18. The Australian 4 Day Enduro, a motorcycling event at Mansfield, commences on November 15. Their website is 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 Oxley Region Amateur Radio Club is the October monthly general meeting, 2pm on Saturday the 1st of October in the SES Building, Central Road Port Macquarie.

Candidates for the Foundation, Standard and Advanced Licences should contact the club via PO Box 712 Port Macquarie NSW 2444 as soon as possible. The Advanced Licence classes are already underway on Friday nights. The next training course and assessments for the Foundation licence will run as soon as 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 CTCSS tone for access.

Visitors are always made most 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. There you will find a wealth of Amateur Radio items in addition to club information.

The September 2016 web edition of the club's bimonthly newsletter "Oxtales", along with past issues, are available on the website. The current issue reports on the club's AGM with a list of all the newly elected office bearers. It also includes reports in words and pictures detailing the club's participation in the RD Contest and the International Lighthouse and Lightship Weekend.

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

Manly-Warringah Radio Society

The club's now famous Flagpole Contest wrapped up at 9:59 this morning.

Hope you made plenty of contacts and had lots of fun. Contest results will be released as soon as they are available, and updates will be posted on the Society's web site, www.mwrs.org.au.

Now, looking ahead: this Wednesday the 21st of September is lecture night. This month's speaker is Philip VK2XPL, who will take us exploring on the 920 MHz or 33 cm band. This band is allocated for Industrial, Scientific and Medical uses, and is populated by all kinds of devices including low power spread-spectrum devices. To find out the implications and opportunities for us Radio Amateurs, come along to the club on Wednesday evening.

The club station VK2MB will be going for the October long weekend in a fortnight's time. Keep an ear out for VK2MB portable then!

Finally, the club will be active for the 59th Scouts and Guide Jamboree on the Air on 15-16 October.

The Manly-Warringah Radio Society usually 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 for more information.

*73 Richard VK2SKY,
MWRS Publicity Officer*

Waverley Amateur Radio Society

The next regular monthly meeting is on this Wednesday, September 21st, at the usual venue, that is, in the Scout hall, in Vickery Avenue at Rose Bay, right behind the Rose Bay RSL Club. After the evening's technical lecture, there will be the show and tell segment as well as general discussion over a cuppa.

The next "Shack night", is on Wednesday October 5th at 7:30pm. Its 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.

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 (147.025, +600kHz, 91.5Hz CTCSS) to make sure that someone will be there or to get the coffee on, is recommended.

The next Project Day is scheduled for Saturday October 1st commencing around 1:30pm usually running through to about 4:30 or 5:00pm.

The club runs a weekly net every Monday evening, commencing at 8pm. We have been trialling running the net only on our new VK2RBV Fusion repeater in FM mode on 438.1125MHz, minus 5.4MHz offset and 91.5Hz CTCSS tone. This appears to have been totally successful with many more people able to access this repeater successfully. 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 (438.575, -5MHz offset, 91.5Hz CTCSS) using AFSK.

The club runs regular Foundation course and assessment weekends. The next scheduled Foundation course and upgrade assessments is next weekend, September 24th and 25th. Bookings are coming in so get in to reserve your place. See our website for details of how to reserve a place on the course or book other assessments or email "education at vk2bv dot org". The following one will be in November.

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. Here you can also renew your membership, purchase items such as Powerpole kits, and book courses or assessments online.

*73 from Eric VK2VE
Broadcast Publicity Officer*

Hornsby and Districts Amateur Radio Club

The next meeting is coming up on Tuesday the 27th and will feature the second talk in the series on Digital Voice, presented by Rob VK2DIO. This will take a deeper dive into specific Digital Voice modes such as D-Star, DMR, Fusion, P25, and Codec2. This will be back at the usual venue - the Mount Colah Community Centre, in Pierre Close, Mount Colah.

The club runs three nets each week; Monday nights at 8pm on the VK2RNS 2 metre repeater starting at 8pm; Wednesday evenings on 3608.5 kHz, also from 8; And Morning Tea with HADARC – is on or near 7104kHz from 9:00 am on Fridays.

HADARC's website is at: 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. If you are setting up a Twitter account, clicking on the list of who this account "follows" will give a list of other Amateur and local which users you may find useful to follow yourself.

Submitted by Julian VK2YJS.

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Summary of coming events;

September

ARNSW Homebrew Group net on the 20th
Manly-Warringah lecture night on the 21st
Waverley ARS Foundation weekend, 24th and 25th
Trash & Treasure at ARNSW on the 25th

October

St George ARS meeting on the 5th
Waverley ARS shack night also on the 5th
Illawarra Amateur Radio Society meeting on the 11th
Hunter Radio Group Meeting on the 14th
Armidale District Amateur Radio Club AGM on the 15th
JOTA and JOTI 2016 from the 14th to the 16th
ARNSW Homebrew Group net on the 18th
Manly-Warringah lecture night on the 19th
Hawkesbury Canoe Classic, a WICEN event, from the 29th to the 30th

November

St George Amateur Radio Society meets on the 2nd
Manly-Warringah lecture night on the 16th
Foundation course weekend at ARNSW on 19th and 20th
Trash & Treasure at ARNSW Dural on the 27th.