



Illawarra Amateur Radio Society

# Propagator October 2021

## Upcoming "ON AIR" meeting 12<sup>th</sup> October 2021

**Due to current Covid lockdown restrictions for the Wollongong there is no meeting planned for the Blue Scope Steel visitors**

## **Our last meeting 14<sup>th</sup> September 2021**

**146.850 & 146.675MHz, VK2MT-R & VK2BGL-R Echolink**

### **On Air meeting due to Covid lockdown restrictions**

Review:

There was another very good response with many members, guests and listeners joining in. This was our third on air meeting since the lockdown and will hopefully be our last.

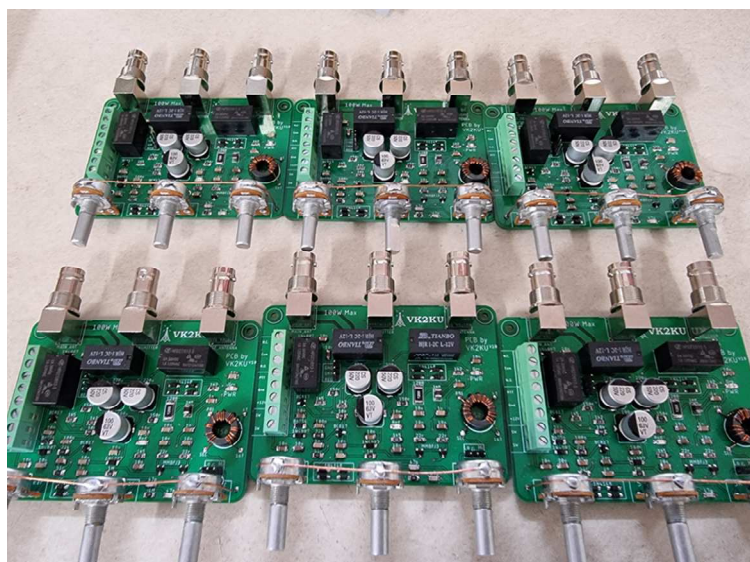
The reading of minutes, sharing of financials and general business was aired, meeting presented by Rob VK2MT club president.

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After call ins we had a few members share some stories with Rob VK2MT sharing RD contest information.

### **NOISE CANCELLERS**

Simon VK2KU noted that there are 6 noise cancellers built, ready for testing by VK2KQB, he has another 14 in the pipeline. Make sure your orders are in.



**6 ready to go, contact Simon VK2KU at [iars.simonr@gmail.com](mailto:iars.simonr@gmail.com)**

## HMAS Voyager Memorial Sundial - Huskisson, NSW



This sundial was installed to commemorate the lives lost in 1964 when HMAS Voyager was struck by HMAS Melbourne. This memorial was donated by the cockatoo island dockyard.

Vaughn VK2KBI noted that this Memorial sundial was out of calibration and after contacting the council with the corrective procedures, it was unfortunately damaged by hooligans before it could be recalibrated. It is a very sad situation when things like this are still happening in our society today.

## IARS on AIR “MINI” presentations

1. Ned VK2AGV discussed the recent rework he did on his Dobsonian telescope. The bearing system is rather an interesting and very important part of this device and Ned shared all his trials and triumphs in getting this working perfectly. I suppose it would be annoying if one tenth of a millimetre disturbance while trying to focus on something billions of miles away. Well done Ned and thank you for this interesting presentation.



2. Phil VK2CPH discussed APRS tracking systems and WICEN portable operations.  
It was interesting to hear about the setup of the local APRS stations. Simon VK2KU is almost finished te setup of the unit that will be placed at Penrose, (Once the pesky lockdowns are over)  
WICEN in the south coast was very active a few years ago with no emergency activations, luckily the south coast has not had any need for that , *“Should we be touching wood here with that statement Phil? 🙏”*

Phil noted that the main activities for WICEN these days is the car rally in Canberra every year with VK1WICEN and also the Navshield for NSW WICEN which is a competition for Wilderness Navigation. This is an event that is thrown open to all emergency services in National parks. This is usually in the 200km radius around Sydney. Each team is given a course map sheet, NO GPS, they are strictly forbidden in this two day event.

The idea is to follow the maps via compass bearings, normally full 48hours looking for hidden markers. The points are based on the difficulty of the marker locations, punching your score card as you go along. Both events like the Navshield and Car rally are meant to hone in your portable skills and a good way to ensure all your gear does work and get familiar on its use.

Thanks for sharing this topic with us Phil, if anyone is interested in WICEN or would like more information on becoming part of WICEN, please contact Phil via the IARS contact portal on the website OR send an email to [iars.keithb@gmail.com](mailto:iars.keithb@gmail.com) and your contact details will be passed on to Phil.

Phil also has more information on all the APRS locations and frequencies if you need more information about them.



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Rob VK2MT has asked that members please send in information that can be used in the monthly propagator.

### Stations that called into the meeting, excludes listeners

Apologies from Wayne (Listener)

VK2AGV – noted that his father was part of the rescue team involved with the HMAS Voyager tragedy

VK2FDSD – Hope everyone is safe, enjoyed the presentations

VK2DXM – Operating from Marrickville tonight using a Andrews copy vertical

VK2MT noted that Mal's antenna was working well because he could hear Mal on 146.250Mhz, the input to 850.

VK2CPH – Keith passed the dropping radio test, Daughter really enjoying her shift work driving trains, the BIG ones



VK2XQX – Thanks for great meeting, and requesting all members to help update our website with current information

VK2EJL – Thanks for the meeting, Congratulations to Rob VK2MT on his retirement. Still having computer issues and should get that sorted soon. Also TS520 blowing fuses, need to get that sorted before I can go on HF.



VK2KBI – Thanks to all contributors of the meeting, also enjoying the model train hobby and the presentations were really interesting.

VK2ZIA – Sitting on the veranda using a handheld portable for the meeting. With dropping things, I once dropped a signal generator on the floor when I walked past it with a loose jumper.

VK2TS – Thanks for the meeting, Got the pictures of the telescope on the propagator. Keith dropping the radio gave me nightmares 😊

VK2BGL – Good meeting, remembering Graham VK2CAG, worked 2m AM with Graham in 1966

VK2LDW – Congrats on the good meeting with both Ned and Phil with good talks.

VK2KHE – Good evening all, good to be back, thanks for the service tonight, really enjoyed the talk from Ned about the telescopes, trying to get antennas sorted for 80m but way too much noise at the moment. Hope to join next time.

VK2XIC – Thanks for the time and effort, good presentations, and very interesting.

Meeting END

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**NEXT MEETING ..... 12<sup>th</sup> October 2021**

**146.850 & 146.675MHz, VK2MT-R & VK2BGL-R Echolink**

***“Covid discussion free” meeting !***

**• *Shane VK2HCO : SDR***

We have been planning to have an SDR evening presentation for a long time and this will still happen. Mal VK2DXM and Shane VK2HCO will be presenting next year, “SDR”. However, in the interim Shane will be sharing his experiences with SDR and hopefully share some ideas to get on boards with this great technology, including the pros and cons

**• *Rob VK2XIC : 13cm and 9 cm operations***

Rob enjoys the challenges that 23, 13 and 9cm communications bring to the table. Rob will be sharing 13cm and 9cm “Getting on air” solutions and the challenges in operating a successful microwave station.

Please join us next meeting if you want to learn more about these interesting subjects in amateur radio. Shane and Rob will be available for any over the air questions you may have.

Don't forget, get your cuppa ready for a fun evening with your mates and join your societies monthly meeting on air.



**Sadly, due to the Covid restrictions on meetings the Snowball raffle has been put on hold**

**Don't forget the two weekly IARS nets as below**



**to the IARS NETS**



IARS Tuesday evening weekly 80m NET on 3.666MHz at 8.30pm hosted by Mal VK2DXM and Rob VK2MT

Don't forget to join us every Tuesday evening, expect the second Tuesday of the month for a great get together on 80m. Signal reports, news and general discussions are the agenda. All you need is 1 x HF rig, Piece of wire + tuner, good cuppa and good chair.

There have been some really good conversations so if you are bored on Tuesday evenings, pop in for a chat.

Saturday Morning EAST COAST NET hosted by Steve VK2BGL

You are invited to join Steve every **Saturday at 9.30am** on our **146.850MHz** repeater (linked to 146.675MHz) or **VK2BGL-R** on Echolink for a very enjoyable morning of general discussions from amateurs who log in from all over the world. This is a great net which is growing in popularity due to the wide range of subjects that get discussed. Solutions to problems from computers, radios, internet and **even plumbing** is just some of the information shared on this easy going net.

This NET is linked to multiple repeater systems including VK2RFS south coast. Join Steve and everyone for a very enjoyable 2 hours on Saturday morning

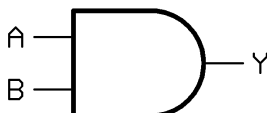


## **Looking to Upgrade to Standard or advanced and even obtaining your Foundation license **during Covid lockdowns****

The IARS **can help** with obtaining your Foundation, upgrading to Standard or Advanced from *the comfort of your own home*.

We have approved AMC accessors that can offer remote assessments for the AMC. Please contact Keith VK2KQB at [iars.keithb@gamil.com](mailto:iars.keithb@gamil.com) for further information. Your society supports further learning, please find out more on how we can help you.

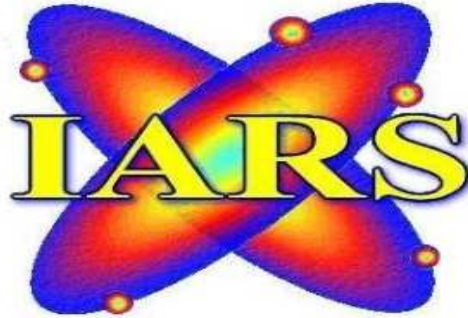
AMC website is [Australian Maritime College - Australian Maritime College](http://AustralianMaritimeCollege.com.au) | [University of Tasmania \(amc.edu.au\)](http://UniversityofTasmania.edu.au)



# REPEATERS



**VK2RUW (Knights Hill)**



**VK2RMP (Maddens Plains)**

## STATUS

- 438.225 with a - 5MHz offset. **Currently off air due to local interference at the repeater site, working on a solution**
- 146.975 with a -600kHz offset NO CTCSS, C4FM enabled **OK**
- 146.850 with a – 600kHz offset (linked to 146.675) NO CTCSS **OK**
- 146.675 with a – 600kHz offset (linked to 146.850) NO CTCSS **OK**
- 53.650Mhz with a – 1Mhz offset 123Hz CTCSS (or key PTT 5 times to open squelch) **OK**
- 438.725Mhz with a -5mHZ offset DMR only **OFF AIR due to upgrades and improvements**
- 1296.850Mhz Beacon with simplex repeater function – **OK**

**The IARS welcomes any feedback on our repeater systems.**

**Please send all your feedback to [iars.keithb@gmail.com](mailto:iars.keithb@gmail.com) and it will be passed on to our repeater team.**

Any donations to help us maintain our great repeater system will be greatly appreciated. Please check our banking details on our website at [www.iars.org.au](http://www.iars.org.au) under the Contact details page.

As reference of the donation please add your Call sign and the words “Repeater Donation”



## LOOKING FOR SOMETHING to SWAP, BUY, SELL, an OLD PART

Parts you may need for repairs or some radio gear you no longer need that could go to a new home.....?

Email [irs.keithb@gmail.com](mailto:irs.keithb@gmail.com)

### Giveaway:

I have one of these, brand new still in a box Ryobi charger for the ONE+ battery system (sorry no battery) Free to anyone who is short of a charge. Keith VK2KQB [irs.keithb@gmail.com](mailto:irs.keithb@gmail.com)



### \$10 donation to the IARS:

I have one of these, a working old mean well power supply, 12VDC (adjustable to 13.5Vdc) 25Amps The cost is \$10 donation to the IARS and its yours , contact Keith VK2KQB [irs.keithb@gmail.com](mailto:irs.keithb@gmail.com)



## *Disposables Donation Table (on hold during COVID)*

Each meeting we have the disposables table with items donated to the club.

Please keep the support for this going and bring oddities in and take some home for a small donation to the IARS. With the next meeting please bring along and donate those old items that you no longer use and may even have thought about throwing it in the bin, someone else may be looking for that very part. Wire, pieces of coax, old parts, plug packs, power supplies, capacitors, resistors, coils, tubes, knobs, anything that someone can use.







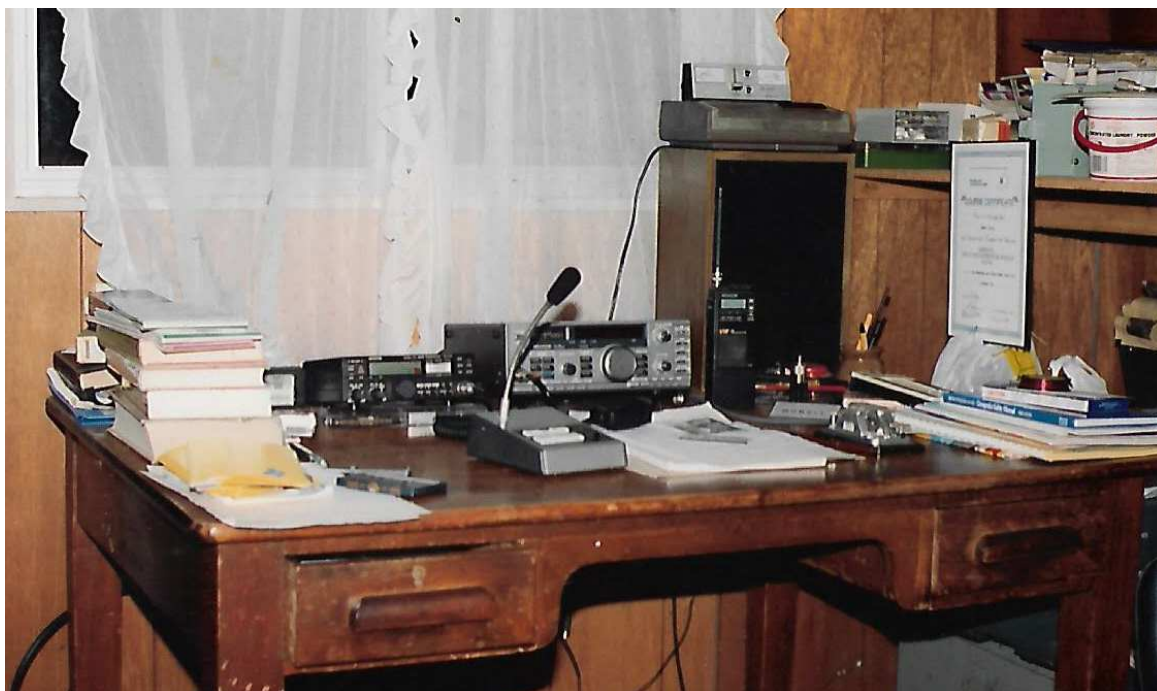
**Share it with us, this could be suggestions, technical ideas, circuit diagrams, IARS community projects, pictures of your latest shack project, in fact ANYTHING of interest**

Let us know by return email or [secretary@iars.org.au](mailto:secretary@iars.org.au)

**Also, if you have some IARS related pictures or information that we can put on the **IARS website**, please let us know and we can get that happening.**

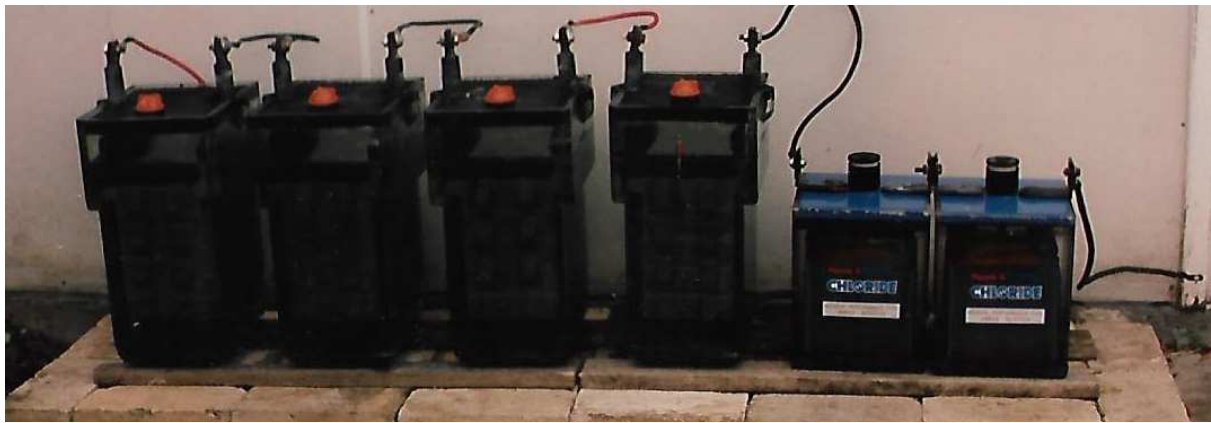
## ***Shack Blast from the past***

**Rob VK2XIC has shared some information from older shack days**



My Station was set up in my Man Cave, on a second-hand desk I bought from a church-operated second-hand shop at Warrawong, which has long since disappeared. When I bought the desk, I found a sticker under the top which showed it was from Brambles Transport toss-out.  
I still use the desk to operate from.





The 2 Volt batteries were the power to run the station in that early time, but not as early as the Log. From memory the batteries were 2 Volts and 500 Amps. To keep them charged, I had a 12 V car battery charger running 24 hours 7 days a week. I ran this way until I could afford to buy and build the Dick Smith VK 13.5 V 20 Amp power supply. I still have the said unit but have not used it for some years.

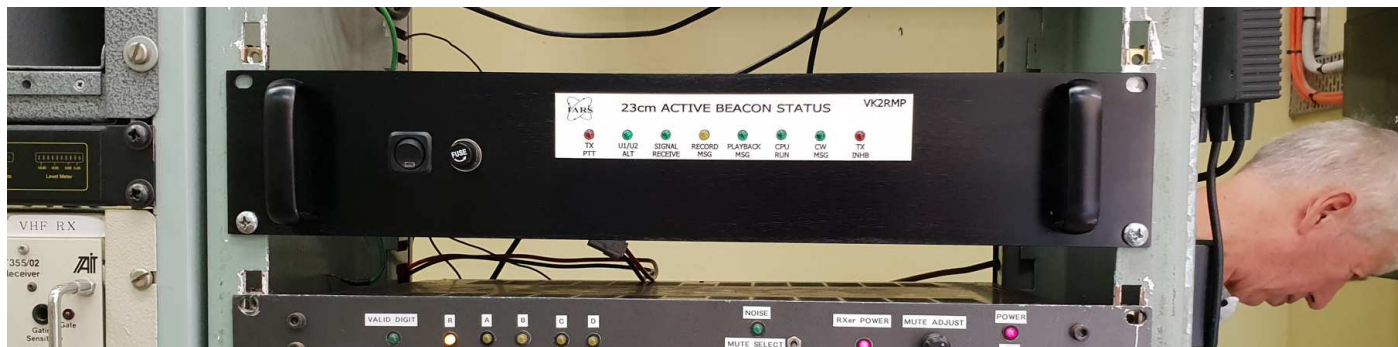
Foolishly, when I used the VK Power Supply, I (for some reason) switched the battery charger off. The batteries, which were second hand \$5 each through outs from Energy Distribution, a suction of Energy Services BHP Steel, where a Black-start Battery House was being refurbished, I along with another radio amateur purchased them. So, being quite old, they installed the tall ones in the battery house back in 1958 or 59 when the No. 2 Blower Station was built.

Date	Remarks	Freq	Mode	Power	Time	Station
18/3/88	Chris. Fairfield West	14.6.850	FM	100mW	12.00	UTC
20/3/88		14.6.850	FM	100mW	12.00	
28/3/88	Bob Lithgow	14.6.850	FM	100mW	13.15	
28/3/88	Ken Bondarman	14.6.850	FM	100mW	13.15	
1/4/88	Harry Dapto duplex	14.6.850	FM	100mW	23.55	
1/4/88	Harry Dapto direct simplex	14.6.850	FM	100mW	00.12	
2/4/88	Tom (A. Park mobile)	14.6.850	FM	100mW	09.50	
4/4/88	Sony (mobile at Berremba)	14.6.850	FM	100mW	07.40	
13/4/88	Harry Dapto	14.6.850	FM	100mW	09.30	
27/4/88	Harry Dapto	14.6.850	FM	100mW	18.00	
29/4/88	Harry Dapto QSY	14.6.850	FM	100mW	13.02	
7/5/88	Rob QSY	14.7.300	FM	100mW	07.18	
7/5/88	Rob Wallington (M) 5.45 pm	14.7.275	FM	5W	07.19	
9/5/88	Harry Dapto	14.7.850	FM	100mW	13.00	
15/5/88	Alan Dapto (600mW)	14.6.850	FM	100mW	06.40	
17/4/88	Brian Bu	14.7.350	FM	5W		
22/7/88	Kevin Northside	14.6.850	FM	100mW	11.30	
27/7/88	Reg Newtown	14.6.850	FM	100mW	11.25	
27/7/88	Reg Newtown	14.6.850	FM	5W	12.15	
27/7/88	Sam Albon Park	14.6.850	FM	5W	12.15	

The Log is a few entries in 1988. "Log a" is the first page of the log which covered two leaves. A left hand side and "Log b" the right hand side of the same page.

Thank you Rob for sharing this with us, if you have anything similar to share please send to [iars.keithb@gmail.com](mailto:iars.keithb@gmail.com)

*Due to the recent reports of the 23cm Beacon we would like to encourage you to use it more often.*  
**23CM Beacon operational information**



### **What**

- FM Simplex Repeater operating on 1296.850MHz
- RF Power 20 Watts.
- Vertical Omnidirectional Antenna of 11dB gain.
- Person in picture at Maddens Plains, IARS President Rob VK2MT (Working hard?)

### **Where**

- Maddens Plains, Grid Reference QF55Is.
- Latitude: 34.27Deg South Longitude: 150.94Deg East
- Height: 371 Metres above sea level. (Not including the height of the tower).

### **Purpose**

The purpose for the development of this particular repeater is;

To encourage interest and experimental development in the higher bands such as 23cm.

It can be used to assist amateur radio operators to develop their own station transmitters, receivers, RF amplifiers, pre-amplifiers and antenna design.

Test the operators experimenting with various modes.

It is a beacon which can be used to monitor propagation on the 23cm band.

### **Basic Description**

The general principle of the repeater is that it is simple. The transmitter stages consist of a 2 Metre exciter, followed by a transverter. The transverter has an IF input of 144.850 MHz, up to, but no greater than 1.0W or else it may be over driven. The RF output is of the order of 2.0W. The next stage is the RF PA of 25W.

The memory of the controller chip has been programmed to function for a period of 240 seconds (4 minutes) more than ample time to conduct any form of experimental test. The antenna is a vertical omnidirectional antenna with approximately 11dB gain.

### **Operation of the Beacon**

Approximately every 10 minutes a string of Morse Code will be transmitted from the beacon. The interesting part of this Morse code is that it is part dynamic. There are two values which are actively monitoring the unit on site.

The first is the Temperature inside the cabinet in degree Celsius. The second is the system voltage currently at the repeater site. The Morse code message is structured as follows:

*“VK2RMP experimental beacon test QF55LR TEMP XX.X Deg SYSTEM VOLTS XX.X”*

During the Beacon operation the Simple section will not operate. The beacon will not transmit whilst the simplex repeater operation is in progress and will wait until the simplex process is complete

## Operation Procedure of Repeater

It is a simple process after selecting the Repeater frequency.

1. Listen and wait 5 seconds if you hear anything.
2. Press your PTT **once** for 1 second, (no longer)
3. If a tail and beep comes back to you, you good to go.
4. If nothing comes back to you then it could be that your signal is not getting through **OR** there is someone using it but you may not hear them. (they could be far away) Remember Maddens plains has a very good coverage into Sydney, what it hears you may not and it is 23cm ☺
5. You could try again after 30 seconds by going to step 2 and trying again.

Pressing the PTT quickly to see if it responds (similar to a duplex repeater tail) will not interfere with someone else's transmission, as long as the PTT is quick, and not multiple times, this could be annoying for someone trying to record.

Summary : **One** quick **one second** PTT should give you a Tail and a roger beep. If not someone is using the repeater **OR** your signal is not been received by the beacon.

If there was no response it may be good to wait for at least 30 seconds to see if the unit was in use. Preferably 150 seconds as it may be a SSTV transmission.

Once deciding to commence your transmission it is best to operate the PTT button for about 1 second before speaking or transmitting data of pictures.

The reason for this is to stop any clipping at the start of the transmission. The repeater has a 0.5 second noise suppression timer to avoid false triggering.

Once you release the PTT there is a one second delay before the recording stops and the current reception cycle is terminated, this is to allow for short signal drop off's during your over.

Without this timer, a signal drop off may prematurely terminate your over and begin re-transmitting what you have just transmitted, whilst you are still recording, rather messy.

After this one second delay the repeater will commence to re-transmit your over. When the repeater has concluded your transmission you will hear an audible 'Rodger Beep' of approximately 750Hz.

It is after this Roger beep that a respondent or yourself may commence the next transmission. If you do not hear the 'Rodger Beep' wait until you do.

Please make the transmission long enough to finish the job and short enough not to cause any others to be impatient. Remember to be patient - including hearing the "Roger beep" - and avoid any difficulties.

When transmitting data modes such as RTTY or SSTV, ensure the transmission **DOESN'T** exceed the 240 second time window, because if you do, the signal **will be unintelligible and fail**.

Keep to the simple operating procedure and you will be able to enjoy our hobby that much more.



## Upcoming events .....

# OceaniaDXcontest

## Calling all testers – it's time to get ready for the 76<sup>th</sup> OCDX contest!

First established in 1934 and earlier known as the VK/ZL contest, the Oceania DX Contest (OCDX) is the only international HF radio contest where the focus is on working DX stations throughout Oceania. Please join us again over the first two weekends of October for the 76th running of the this epic event.

PHONE - 06:00 UTC Saturday 2 Oct to 06:00 UTC Sunday 3 Oct 2021

CW – 06:00 UTC Saturday 9 Oct to 06:00 UTC Sunday 10 Oct 2021

The rules are the same as last year – see <https://www.oceaniadxcontest.com/rules>. Note that we have decided to continue with starting and ending the contest at 06:00 UTC.

Please submit a log, even if you only make one or two QSOs, so we can verify these QSOs when calculating the final scores for all entrants. Upload your log via the form at <https://ocdx.contesting.com/submitlog.php>.

Thanks to our generous sponsors, numerous plaques are up for grabs again this year – along with some new ones for 2021. Karsono Suyanto YB0NDT is sponsoring a new plaque for the highest scoring entrant from Indonesia in the CW Single Operator All Band Low Power category and the Australian Ladies Amateur Radio Association (ALARA) is sponsoring two new plaques aimed at promoting YL activity:

The Florence McKenzie (Mrs Mac) plaque – to be awarded to the YL Single Operator entrant from Oceania with the highest combined Phone and CW score

The Austine Henry plaque – to be awarded to the YL Single Operator entrant from outside Oceania (i.e. rest of the world) with the highest combined Phone and CW score

Any questions? See our web site at <https://www.oceaniadxcontest.com> or send an email to [info@oceaniadxcontest.com](mailto:info@oceaniadxcontest.com).

73 and we look forward to seeing you in the OCDX contest pileups!

Oceania DX Contest Committee (ZL1AXG, ZL3GA, VK3GK, VK4FH, VK3MI/ZL1AZE, VK3TZ, VK4QS, VK5GR, VK7GN, YB0NDT)

## Upcoming meeting presentations .....

- **October 2021 : On air mini presentations**

- **November 2021 :** The famous IARS auction night with our host Simon VK2XQX, letting us get away with some great bargains.

## IARS AUCTION !!!! GET READY NOW !!!!

The IARS AUCTION will be full steam ahead with **Captain Simon VK2XQX** or **VK2FO** which his DX friends call him 😊, (**Government regulations dependant on meeting, will advise**) Please get your items together, it will be our first meeting since the lockdowns and there will be LOTS of goodies to be bought.



- **December 2021 :** Pizza night dinner with a show and tell, perhaps a surprise this year 😊

We have decided to give our famous chef Vin VK2VIN a break this year 😊. He has been preparing a feast every year end for 4 years, we believe he can sit back and enjoy some relax time with his friends this year.

**THANK YOU** Vinnie for all the hard work you have done every year.

This year, come and join us for Pizza night and Trivia, Christmas Evening dinner meeting, This is FREE to our financial members and \$5 per person not a financial member. There will also be Trivia prizes for First, Second and Third.

- There will also be a special lucky door prize to everyone who is there with an option to purchase more tickets for the draw. 😊



## Fun Corner

Please send in your funnies to [iars.keithb@gmail.com](mailto:iars.keithb@gmail.com)



OOPS! THINK BEFORE YOU SPEAK

Thanks Doug, Peter, Dave

That's all for now, hopefully catch you all on 146.850MHz, 12<sup>th</sup> October 2021  
Stay Safe

**73's**  
**Keith VK2KQB**  
**IARS Secretary**

**IARS, Amateur Radio in the Illawarra since 1948**