



Illawarra Amateur Radio Society

Propagator May 2021

Upcoming Meeting on the 11th May 2021

If the COVID19 conditions and restrictions for NSW do not change

The next meeting **will be at the** Blue Scope Steel visitors centre 7.30pm.

Blue Scope Northgate entrance off Springhill road



THE FOLLOWS A COVID19 SAFE PLAN

There will be distancing and preventative measures still in place with hand sanitisers available for use, please adhere to info below as a minimum.



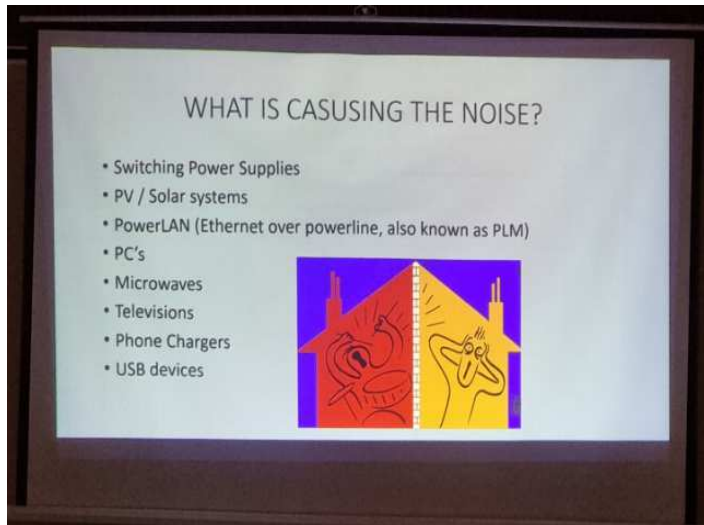
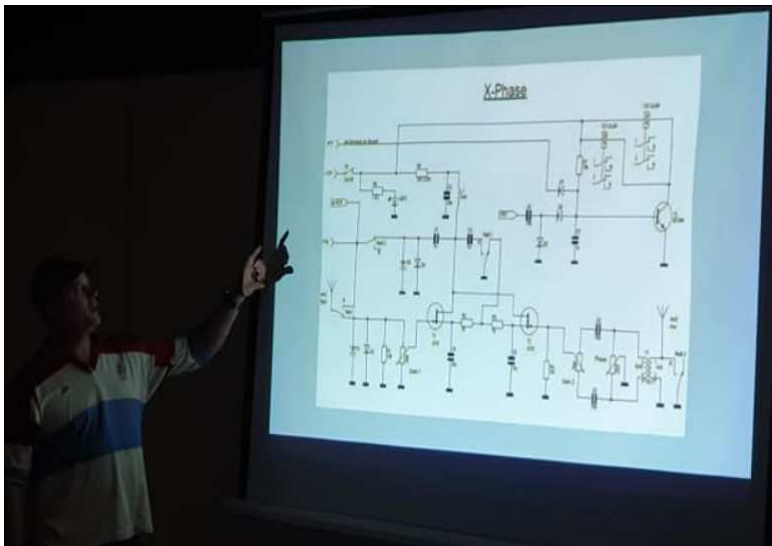
Our last meeting 13th April 2021

IARS Noise canecller project by Simon VK2KU

We really cancelled out some of the annoying noise last month with a great presentation by Simon VK2KU. Simon shared the hours of work he has put into refining the noise canceller project he started some months ago. The custom PCB with newer SMD components is the key feature of his new version with some PCB mounted BNC connectors, another addition to the latest offering. Simon is ensuring that he makes a great kit available to IARS members. If you were in the unfortunate position where you missed Simon's presentation, don't worry, Simon has been invited to share this project with amateurs at the Wyong field day at the end of the month.

So come along to MAYHEM (more details to follow on below)



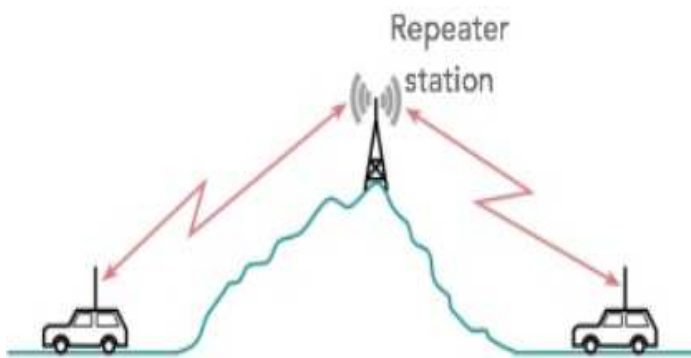


We all enjoyed the presentation very much, including the coffee and cake.

Thank you Simon, a great presentation, looking forward to MAYHEM 🤖

NEXT MEETING

Repeater systems , Rob VK2MT



As we are all aware, Rob VK2MT manages the repeater team who are dedicated to ensure that our repeaters are maintained and kept up to date with the latest technology. Rob has been involved in the IARS repeater network for many decades and during his time has developed interesting control systems which are very cost effective, reliable and simple.

Rob does not often share the fact that he and his team spend many hours behind the scenes maintaining some of the most well-known and widely used repeater systems.

After some persistent arm twisting by myself and others, Rob has decided to share his experiences and challenges with us on the 11th.

Thank you Rob for finally giving in 😊

So if you want to find out what it takes to run repeater networks and see what goes on behind the scenes, then come along for a great presentation on the 11th May 2021

Same as the previous meetings there will be tea, coffee, biscuits and perhaps even some cake 😊

Looking forward to seeing you all there on the 11th May 2021

SNOWBALL

The SNOWBALL will be back in action this month after a short Hiatus, make sure you are in it to win it.

Please be a part of this fundraiser which can get you some cash in a hurry. You will need to be a IARS member to participate, if you not then speak to John VK2EJL on the night and he will be more than happy to fix you up.

Simon VK2KU, the good looking fellow with BALLS will book you in for \$5



As always all monies received goes straight back into your club for your enjoyment 😊

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.

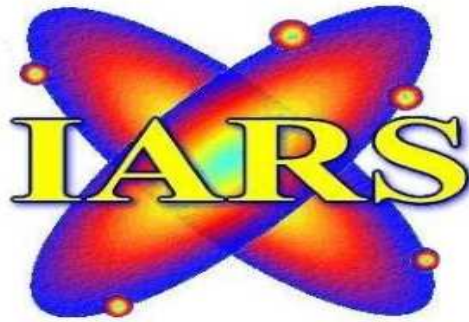
Saturday Morning EAST COAST NET hosted by Steve VK2BGL

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.

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 Back on air**
- 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.

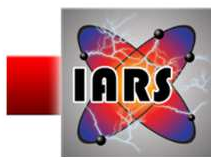
Please send all your feedback to iars.keithb@gmail.com or secretary@iars.org.au and it will be passed on to our repeater team.

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 under the Contact details page.

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



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Illawarra Amateur Radio Society

Amateur Radio in Wollongong since 1948

We had a great time with the Mid South Coast Amateur Radio Club with the recent picnic that was held on Saturday the 10th April at Killalea State park. The weather could not have been better with a great turn out of members.

As always, the boys from MSCARC got their portable stations happening right away with IARS member Rob VK2XIX setting up his 23cm station. There was even a ICOM IC706 IIGX installation with Wazza VK2MWK. Who says you can't work on radios at a picnic 😊, there was fun to be had as well with kids and adults running around looking for those elusive foxes.

Well done to all those that managed to hone in their DF skills and find those critters.

As always there was more than enough food and drinks for all with plenty food left over.





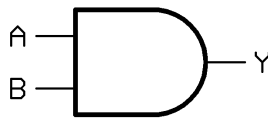
The two clubs are looking to repeat the outing in September/October with the location at the Penrose Bundanoon IARS club house. There will be more information available closer to the time.



Looking to Upgrade your Foundation or Standard licence?

As mentioned previously, let 2021 be the year. The IARS has two options, Ted VK2ARA who is our club tutor and the Radio and electronic school or both 😊. Your society supports further learning, please find out more on how we can help you.

We also have approved AMC assessors and can get your upgrade fast tracked. Please email secretary@iars.com.au or return email if you wish to receive more information on **how the IARS can help you achieve this goal in 2021.**



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 secretary@iars.org.au or iars.keithb@gmail.com

Disposables Donation Table

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

Let us know by return email or 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.

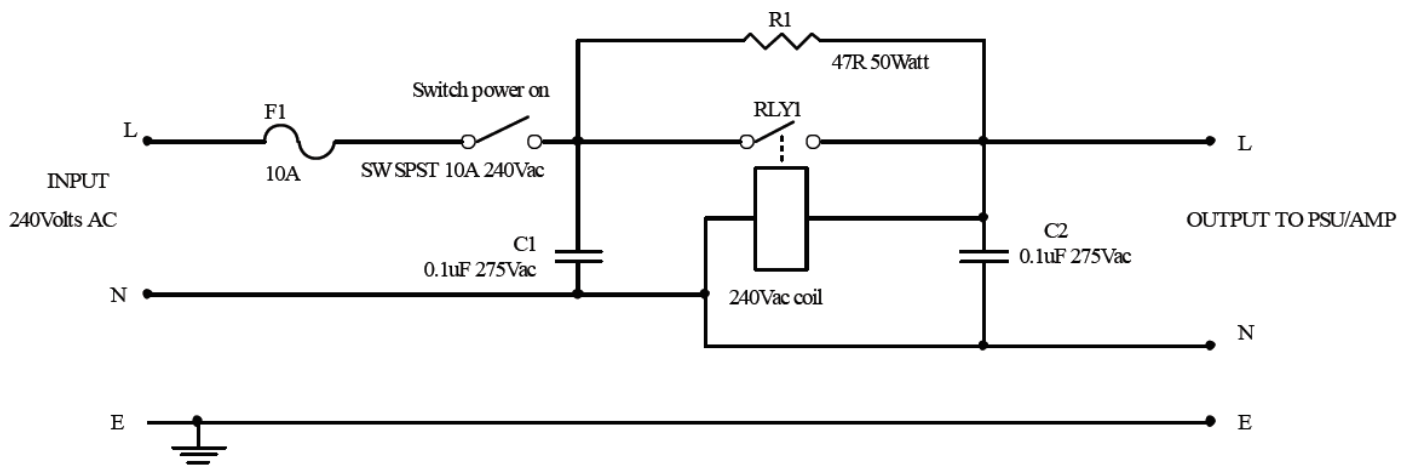
This month's tech idea

SIMPLE SOFT START FOR THOSE BIG AMPLIFIERS AND POWER SUPPLIES

I am sure many of us have cringed when turning on that big old linear power supply or amplifier and the lights in the neighbourhood dim for a split second



Well, there is a very simple solution using one relay and a few simple parts. The unit is self-regulating and will time the full switch on according to the capacitive load of the unit.



This particular setup works very well on a 1kW Linear amplifier and the only variable adjustment that you may need to change for your application would be the sizing resistor R1. As the capacitors charge up inside the power supply, the voltage will get to approx. 70% of the rated voltage (just over 1 time constant) before the relay will energise. Different relays may have different voltage “pull in” so you may need to experiment to get it right. Even adding another resistor in series with the relay coil and changing the value of R1 will setup the time constant require.

The resistor wattage is approximate 5% of I^2R as it is only on for a short period of time. You will need to keep this in mind when changing resistance values but the soft start should operate under 2 seconds. It is also recommended to keep the resistor to this 5% value to act as a sacrificial device should the load develop a fault of low resistance, without causing heating in the soft start circuit. Once the internal capacitors have been charged, the soft start time will be shorter and only increase as the capacitors become discharged.

There are many ways to make a soft start, but this is very simple and effective solution with parts readily available.

This circuit can be used at 12Volts by changing the relay coils and R1 resistor.

For more information, email secretary@iars.org.au

Upcoming events

Trans Tasman Low Bands Challenge,

Next contest - 17 JUL 2021

The Trans-Tasman contest, held on the 3rd weekend in July, aims to encourage Low Band activity between VK and ZL

<https://www.wia.org.au/members/contests/transtasman/>

Only contest bands 160 80 and 40M are allowed with SSB, CW and Digital (RTTY OR PSK)

International Lighthouse Lightship Weekend.

00.01 UTC 21st August to 24.00 UTC 22nd August 2021 (48 hours) ... 7th as their National Lighthouse Day and during that first week in August

<https://illw.net>

There may be a opportunity for the IARS to have a joint lighthouse weekend with the MSCARC.

Rob VK2XIC has advised that the MSCARC had booked lighthouses for the lighthouse weekend.

If you are interested in taking part in this contest **please contact Rob VK2XIC** vk2xic@wia.org.au

Remembrance Day Contest

Next contest 14th & 15th August 2021

This contest commemorates the Amateurs who died during World War II and is designed to encourage friendly participation and help improve the operating skills of participants. It is held on the weekend closest to the 15th August, the date on which hostilities ceased in the southwest Pacific area. A perpetual trophy is awarded annually to the Australian state or territory with the best performance. The name of the winning State or Territory is inscribed on the trophy, and that State or Territory then holds the trophy for 12 months. The winning State or Territory is also given a certificate, as are leading entrants. <https://www.wia.org.au/members/contests/rdcontest/>

Wyong Field Day

30TH MAY 2021



MAYHAM

More info go to the link below

www.ccarc.org.au/category/wyong-field-day/#:~:text=The%20club%20wishes%20to%20announce,fresh%20date%20and%20new%20name.

Upcoming meeting presentations

- **May 2021** : Rob VK2MT will be presenting repeater management. What it takes to have a good repeater network including the fail-safe methods in linking multiple repeater sites.
- **June 2021** : Keith VK2KQB, Power supplies, Keith will be sharing some tricks on power supply design, repairs and maintenance with a look at switch mode and linear type comparisons. Even resurrecting that old PSU
- **July 2021** : Construction night. We will build a VK2KU noise canceller kit on the night.
- **August 2021** : AGM with SHOW & TELL, bring along videos and pictures of your latest projects.
- **September 2021** : SDR (Software Defined Radio) Evening, we look at this technology and how it is growing among AR operators.
- **October 2021** : Our Annual Trivia evening, with great prizes and laughs to be had.
- **Novemembr 2021** : the famous IARS auction night with our host Simon VK2XQX, letting us get away with some great bargains.
- **December 2021** : Great dinner with a show and tell, perhaps a surprise this year 😊

That's all for now, hopefully see you at the Blue Scope Visitors centre on Tuesday evening, 13th May at 7.30pm.

Stay Safe

73's

Keith VK2KQB

IARS Secretary

IARS, Amateur Radio in the Illawarra since 1948