



Founded 1979 Incorporation No A6677 P.O. Box 692, Shepparton 3632
October 2020

VK3RGV repeaters and transmitter operating frequencies

53.725MHz (-1 MHz offset), **In Service**

146.65MHz (-600 kHz offset), **In Service**

438.2MHz (-7 MHz - offset -D-Star), **In Service**

438.650MHz (-7 MHz offset and 91.5 Hz tone access only), **In Service**

438.900MHz (-7 MHz offset- DMR repeater), **In Service**

439.775MHz (-5 MHz offset), **In Service**, IRLP (node #6990)

VK3RDS, 438.7625 MHz (-7 MHz offset DMR repeater) **Shepparton on test @ VK3YNV QTH**

Access to most analogue repeaters is by sub-audible 123 Hz tone or noise/carrier mute (less sensitive).

Club informal on air get togethers - Wednesday evenings. All welcome. Club call sign VK3SOL:-

2mx repeater 8.00pm 146.650 MHz,

3.63 MHz SSB \pm interference 8.30pm.

The vintage radio club have a sked at 11.00am Sunday on the 2 mx repeater.

Meetings occur on the first Saturday of the month at 1pm. Due to the pandemic they will temporarily be conducted on air via our 2 metre repeater and Peter VK3AXI will officiate as President.

Variations in these times, days and location are normally notified in the preceding newsletter.

Website – www.sadarc.org or www.sadarc.org.au Face book - www.facebook.com/sadarc.org

Info for the page contact - Denny French on denny3782@gmail.com

Note: Want to get your licence? SADARC has examination assessors, contact the secretary for details.

The following repeaters do not belong to our club but provide good signals for many members.

Mount Major VK3RDU repeaters, TX operating frequencies, 146.850 MHz and 439.875 MHz

UHF CB Repeater WBT03 Mt Wombat Channels 3- 33, 476.475 MHz, **Off air** * 28/10/2020

DISCLAIMER:- No guarantee is given as to the accuracy of information in this newsletter.

Warning: - There is a danger of electrocution or injury when working on electrical/radio gear or working at heights doing antenna work. You do so at your own risk.

President: - Peter Rentsch

VK3AXI

peter@rentsch.com.au

Secretary: - Andy Ashley

VK3AJA

secretary@sadarc.org

Assistant Secretary:- Geoff Angus

VK3ZNA

Vice-President: - Barrie Halliday

VK3KBY

Treasurer: -Andy Ashley

VK3AJA

secretary@sadarc.org

Membership Sec: - Andy Ashley

VK3AJA

"

Webmaster: - Ray Gardner ray@etheira.net

VK3YNV

Publicity Officer: - Vacant

Communications Managers (External Events):- Bruce (VK3PNG) 0427 715 663 & Darren (VK3HEN) Glasson

Tech. Committee: Geoff VK3ZNA, Ray VK3YNV, Josh Gardner & Rodney VK3UG – with power to co-opt.

Newsletter: - Rodney VK3UG (Editor) rodlynn6@bigpond.com

Peter & Andy (Printing/ Distribution)

Presidents Report October 2020

Under the still existing COVID pandemic we still had our meeting. This, as per the circumstances, was held on air. To all those who called in thank you very much for maintaining your commitment to SADARC and we look forward to catching up with you as soon as we can. At the time of writing this report we are still not able to meet in groups larger than 10 but hope fully this will alter soon.

Since our last meeting Shepparton has gone through its own episode of the pandemic. Thankfully, none of our members were directly affected although I know some of them were tested which resulted in the negative. The response from the community in managing the outbreak once the source had been identified was excellent and all the residents of Greater Shepparton need to be congratulated on their swift action.

Hopefully we should be able to gather for our Christmas Lunch with the members of the Vintage Radio Club. I have found a venue that can seat 50 legally outside in a marquee in Shepparton. The food cost would be about the same as the Mooroopna Hotel if we cannot hold it there. We also have the option of the Club rooms and having it catered for. Discussion on this topic will be held at our next meeting.

The Technical Committee have been busy and I would assume if there is not some information in this Newsletter we will get an update at our November Meeting.

As most of you will know our AGM was deferred until we can meet face to face again and I think this was a good move.

At this time (27th October) we are still not allowed to gather in a group larger than ten so our meeting will be on air as per COVID normal for November. If there is a change to this I would definitely like to meet at the Vision Centre. If there is a change, I will ask Andy to send out an Email to everybody notifying them of the change. So please watch your "In Box" just prior to our meeting.

That is it for this month and I look forward to hearing or seeing you all on the 7th November for our "on air" meeting.

Cheers for now.

Peter Rentsch
President

CLUB CALLANDER

7th November – Regular Meeting – 2m Repeater Mt Wombat 1.00pm

5th December – Christmas Lunch – venue to be advised

January 2021 – no meeting

6th February 2021 – Regular Meeting – Vision Centre

Repeater Notes

Over the last few weeks the technical committee have been planning to visit Mt Wombat on a Saturday to test all the antennas for resonance, losses etc. and to deal with some power supply problems. Poor weather has delayed this work, as if it is very wet, raining or particularly windy it is not practical or safe to do any work up there.

All being well this Saturday 31st the tech committee expects to test the tuning of the antennas in the morning. In the afternoon (exact time unknown at this stage) the various antennas will be tested for performance into various areas either close in or towards the extremities of range to assess which antennas are the best performers and if they are not as hoped for, we want to work out what remedial work is needed to correct the problems.

This is where we would like your assistance. As users when asked (general call to any who can assist) check the signal strengths (preferably by the S meter (number of bars etc) or if you have better facilities give a relative reading in dBs) of each antenna as it is tested, make a note of it and report back on air or via email to VK3UG, VK3ZNA, VK3YNV or Josh. Also please make known your location so we can get an idea of the coverage areas of individual antennas on the three bands – 70cm, 2m, 6m.

If the weather is kind to us on Saturday 31st we expect to be able to get this done. However, if the weather is poor we may not be able to go ahead with this work.

Thank you in anticipation of your help.

Rodney VK3UG for the Tech Committee.

SADARC MEETING MINUTES

Monthly meeting 3 - October 2020

Meeting was “on air” via 2-meter repeater VK3RGV

In Attendance. VK3FTRK Geoff, VK3ASK Peter, VK3EB Dallas, VK3FPSR Peter, VK3ZYZ Denys, VK3AJA Andy, VK3FALN Alan, VK3YNV Ray, VK3BLD Robert, VK3FBEN Peter, VK3OV Pat, VK3PGK Graeme, VK3ZNA Geoff, VK3FNQS Jason, VK3NQS Colin, VK3ANP David, VK3ZE Huntly, VK2ACR Rob, VK3KBY Barrie, VK3BPH Kevin, VK3AFD Arthur, VK3TJS Jacek, VK3UG Rodney.

Apologies; VK3YYY Ian, VK3TEX Les.

Correspondence:

In wards: QSL cards, Membership cheques, AMU email re exams allowed to restart. Rob VK3EY requesting his QSL cards. Graeme Colson asking if anyone at the club has pictures of Bruce Plowman. Jake Boyle VK3FJBO telling us about his website with repeaters on maps. Online repeatermap.com. Steven Hunter thanking SADARC for keeping CB repeater going.

Outwards: QSL card sorted and given to Rob VK3EY. Replies to above emails.

Moved by VK3PGK Graeme, VK3ZYZ Denys. All in favour.

Minutes last meeting: Accepted as read, Moved by VK3ZNA Geoff, Second by VK3ASK Peter. All in favour.

Reports:

Financial; Read by Andy, Moved by VK3AJA Andy, second by VK2ACR Rob. All in favour.

Technical; Read by Ray, spoke about activities planning trips to Mt Wombat, to look at antennas, re last meeting minutes. And to check the equipment for UHF CB. Power management system upgrade. Josh is working on software for power management.

Rodney spoke about items above also.

Geoff spoke about equipment required for 6 m antennas. Some adjustment may be needed to antenna tails. Report moved by Ray, second by VK3PNG Bruce. All in favour.

General Business:

VK3FPSR Peter has mentioned newsletter this month will be the last one posted out, all email now.

VK3UG Rodney has said no one has disputed email/web only.

This was moved by VK3ZNA Geoff, VK3KBY Barrie. All in favour.

Xmas get together, VK3FPSR Peter has mentioned that we may take up offer of VK3FTRK Geoff, for the BBQ to be at his property. VK3ASK Peter has suggested we use club rooms. VK3UG Rodney suggested the Vintage Radio Club be involved also! Naturally, this will be correct. We should look at catering for the event. VK3ASK Peter will confirm if we are able to bring Alcoholic drinks to site.

VK3ZNA Geoff suggested we should leave till November meeting to make decision.

Catering could be provided by several ways and some ideas will be floated then. VK3ANP Dave suggested Azem may be available? Perhaps spit roast or similar.

This was moved by VK3ASK Peter, VK3PGK Graeme. All in favour.

VK3YNV Ray has spoken further about RF detector mentioned last month, He will be discussing it at the Technical Committee meeting tomorrow. Decision will be held over till November meeting.

VK3YNV Ray has explained that the forum on our website is only for Members of SADARC and quality of items posted is of remarkably high quality. Ray has had a few people requested to join forum that are not members of SADARC and has suggested we keep to the rules above. VK3UG Rodney has suggested the same. VK3FALN Alan also agreed. VK3KBY Barrie also has agreed.

VK3FNQS Jason suggested automatic forum membership with SADARC. VK3AJA Andy suggested the system we already have is fine, not too complex. VK3YNV Ray and VK2ACR Rob agreed. The Vintage Radio Club are of course welcome!

This was moved by VK3FALN Alan, second by VK3KBY Barrie. All in favour.

VK3FPSR Peter Do we have associate membership system for the forum?

VK3YNV Ray has suggested this is not required. VK3ZYD Denys has mentioned info. On page saying "you need to be a member of SADARC to post"

This was moved by VK2ACR Rob, second by VK3PGK Graeme. All in favour.

VK3UG Rodney has mentioned Mt Wombat antenna has not been invoiced but may need some extra funds for extra equipment. (The antenna cost has already been approved)

Meeting concluded at 2:08 pm

Not sure on November meeting yet (pending restrictions)

SADARC AGM OCTOBER 2020

Held on air on 2-meter repeater VK3RGV

Opened 2:13 PM

In attendance same as the monthly meeting.

It has been suggested AGM be deferred to a later date due to COVIT-19 Restrictions. VK3FPSR has suggested it be moved to November with further time if can't be done by then. This was moved by VK3ASK Peter, second by VK3BEN Peter. All in favour.

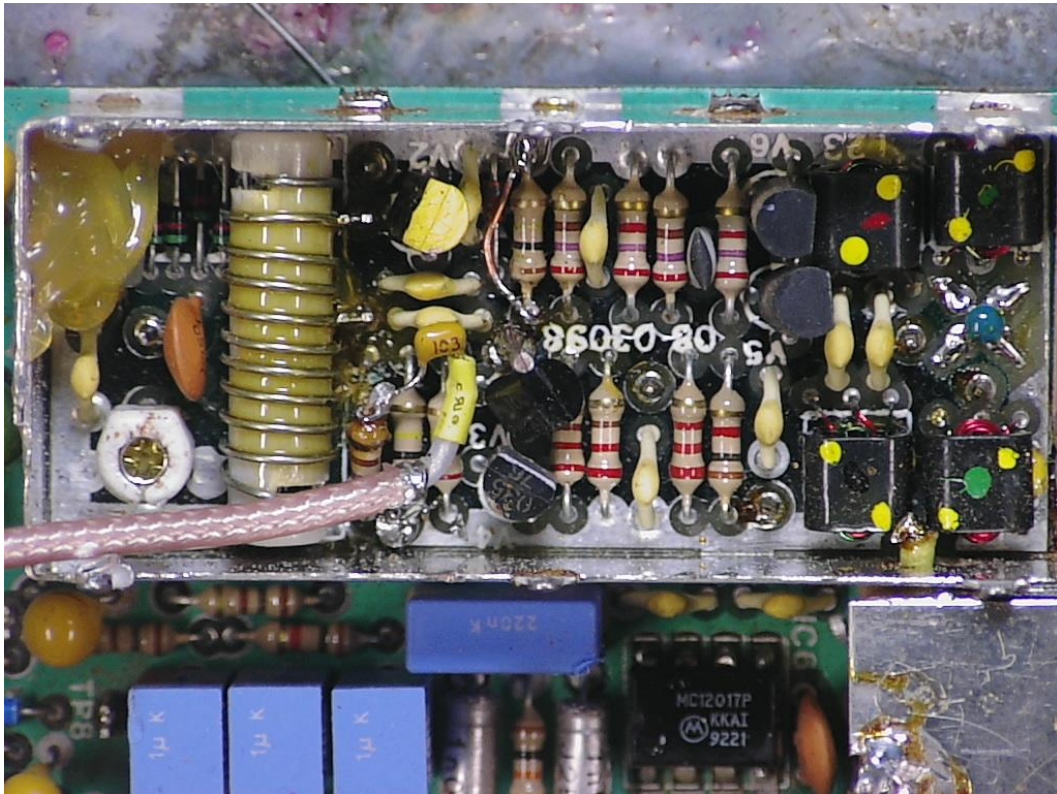
Andy will apply for extension of time to Consumer Affairs Victoria. If we can't meet in November.

Meeting closed 2:21 PM.

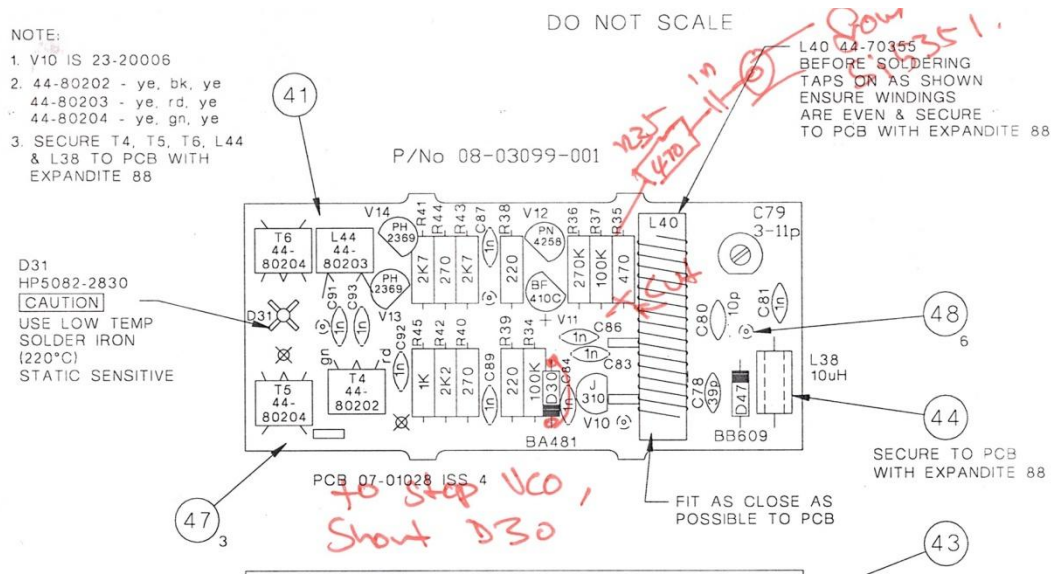
Editor's Ramblings

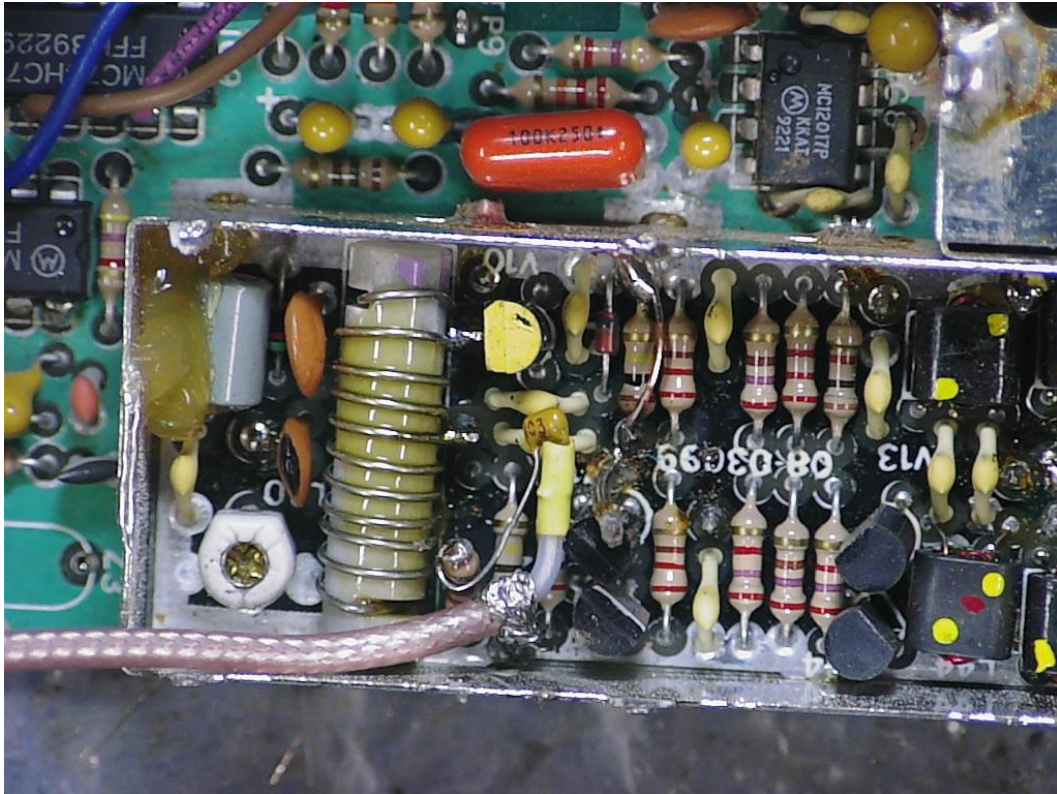
- The Forum that RayVK3YNV has instigated as part of our website is attracting interest further afield than our local club. It has been decided that at this stage the forum access for posting of info etc will be restricted to our club and members of our sister vintage radio club. It is necessary to contact Ray to be manually admitted to the full facilities of the forum. Ray will be altering one or two points which will make it clearer to viewers what the forum conditions are.
- This is the first issue of the newsletter that will not be going out by Snail Mail (for the reasons stated in last months newsletter), and will only be available via email or via the website.
- Note Peter ex VK3FPSR now has the **callsign VK3AXI**. Unfortunately this does not mean that Peter has up graded his licence.
- Attached at the end of the newsletter is Peter's (VK3AXI) list of radio books that members can buy at very reasonable prices. I hope Peter you have grabbed a book or two that will assist you to upgrade your licence. To other Foundation or Standard grade amateurs here is an opportunity to get the books you need. Peter's email address is at the start of the newsletter.

This is the second section of VK3ZZ Denys's article on the Codan 8525 25 watt transceiver conversion to 6 metres or other bands using a nifty little frequency synthesiser . Refer to last month's article for the related information.



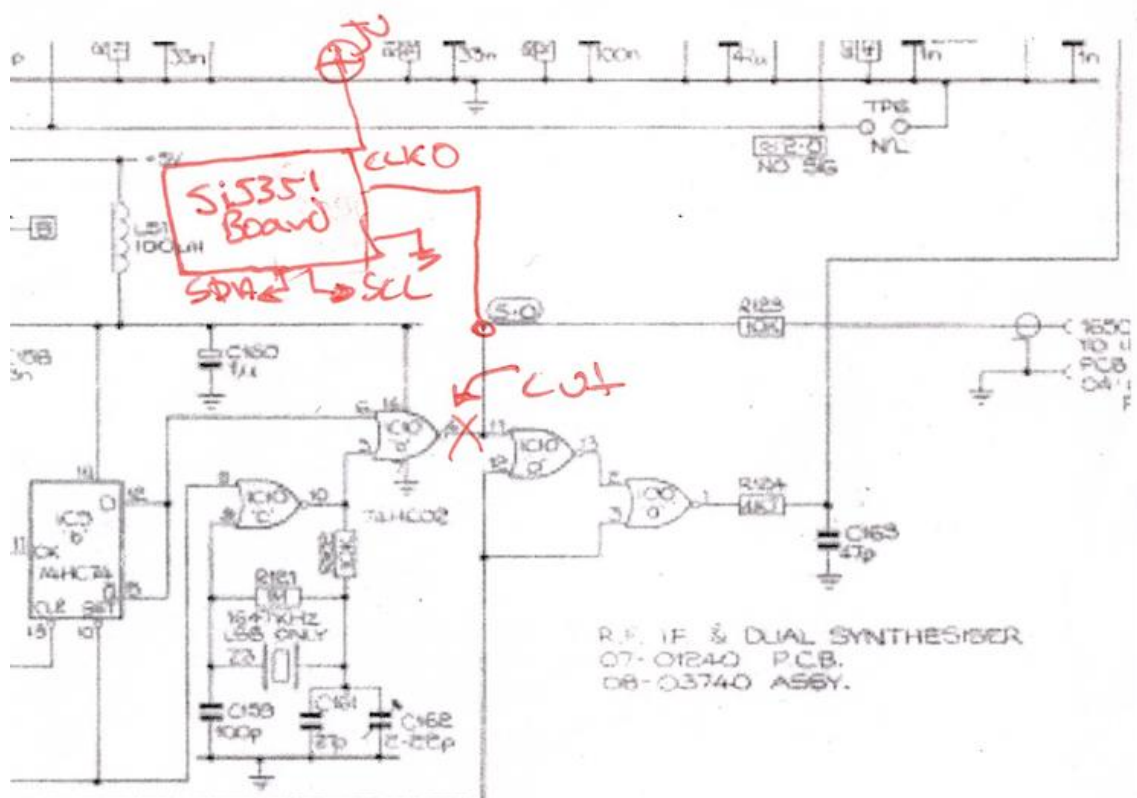
And the second one is just the same.



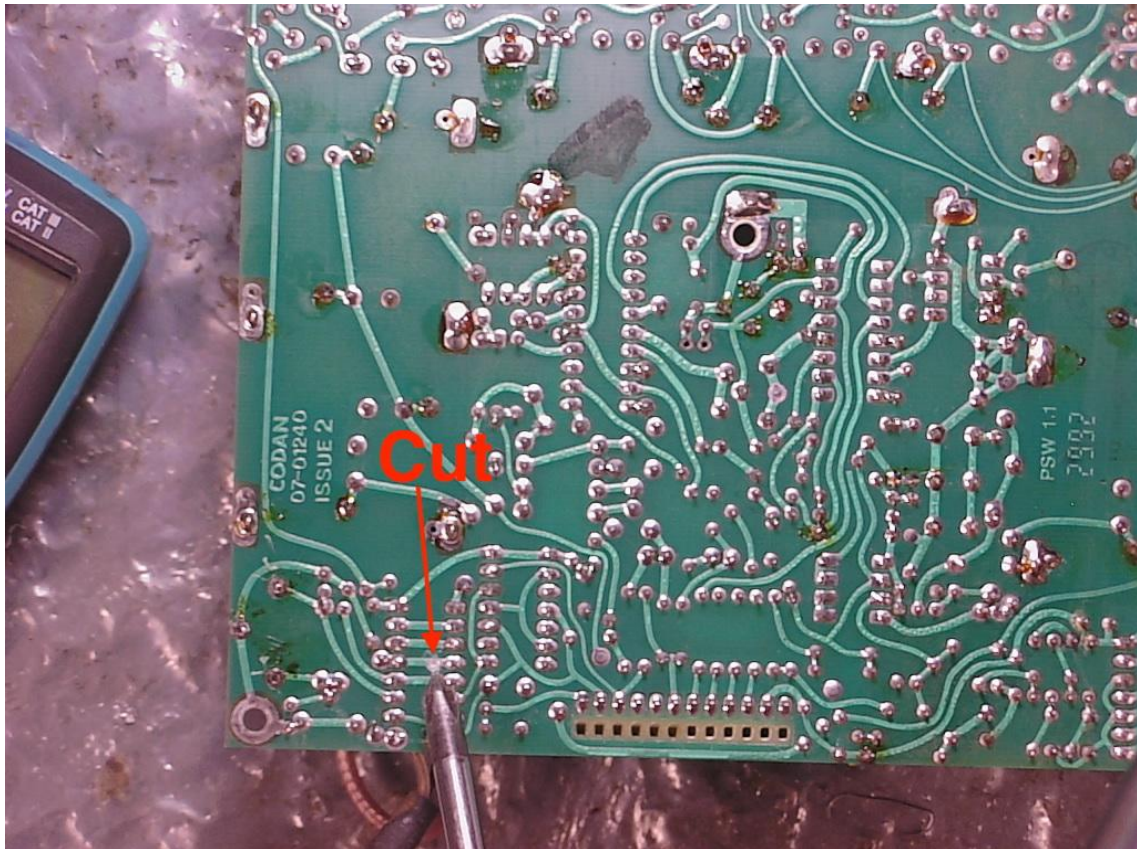


The coax cables are fed out the original tuning hole in the lids. Then the lids are re-soldered to the cases.

Under the PCB, a cut needs to be made.



This is to disable the side band oscillator.



A coax is then soldered to IC10, pin 11. The shield goes to the gnd pin of the other (black) coax.

The third part of Denys's article on the Codan 8525 will follow next month.
(editor)

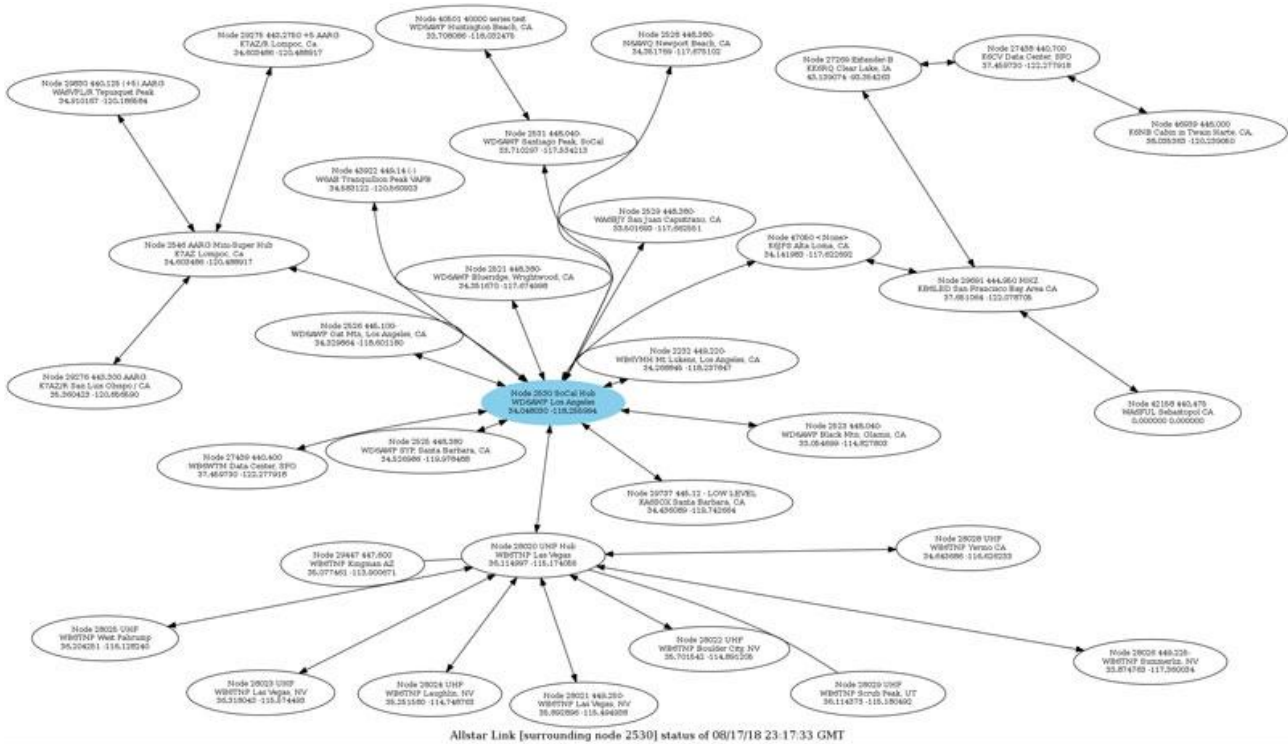
Welcome to AllStarLink! By Jason VK3FNQS

AllStarLink is a network of Amateur Radio repeaters, remote base stations and hot spots accessible to each other via Voice over Internet Protocol. AllStarLink runs on a dedicated computer (including the Raspberry Pi) that you host at your home, radio site or computer centre. It provides linking of these radio "nodes" to other systems of similar construction anywhere in the world via VoIP.

AllStarLink's primary use is as a dedicated computer node wired to your repeater or radio. Connections from Echolink, other VoIP clients and telephone calls are supported. We also have a Java Applet which can be used on older computers to access AllStarLink nodes.

AllStarLink has **19,594** users and **16,024** nodes.

Allstar uses Hubs and nodes to connect to each other. See bubble chart below



There is one main hub to connect to in VK, it is the VK6HUB (42732), this node has up to 50 connections or more some days particularly when the nets are on.

Other nodes of interest are 41288 UKHUB
 2560 WINSYSTEM USA
 50522 VK3 LINKED SYST. (VK3WIDE)

What you need for Allstar Linking.??

The most common method is via a Raspberry Pi and a Interface board such as a RA-35, URI or R1-2020 (Chinese unit). Most units are built in the USA and an internet connection. There are too many units too list here but Google search is a great tool to find them. A Rasp Pi is a For about \$150-200 AUD, you can start from scratch with your setup. Raspberry Pi 3B+ or a Pi 4 is ideal for a Node and these units are available from Jaycar Electronics. A Pc or laptop is handy to download the files required to, then transfer files to a SD Card that plugs into the Raspberry Pi.

Picture below is an AllstarLink Interface board, sells for about \$40USD



Pic below is the newer Interface Box, which has multi uses such as connecting Zello, Echolink, PSK31 & Allstar of course. Price is about \$80AUD

Nuotech



What is a Raspberry Pi ???

The Raspberry Pi is a low cost, **credit-card sized computer** that plugs into a computer monitor or TV, and uses a standard keyboard and mouse. It is a capable little device that enables people of all ages to explore computing, and to learn how to program in languages like Scratch and Python. It's capable of doing everything you'd expect a desktop computer to do, from browsing the internet and playing high-definition video, to making spreadsheets, word-processing, and playing games.

What's more, the Raspberry Pi has the ability to interact with the outside world, and has been used in a wide array of digital maker projects, from music machines and parent detectors to weather stations and tweeting birdhouses with infra-red cameras. We want to see the Raspberry Pi being used by kids all over the world to learn to program and understand how computers work

A Rasp Pi can be used wirelessly or via an Ethernet cable connection.

Pictures below are of a Raspberry Pi, in and out of a protector case.



How it all works?

The Raspberry Pi connects to the internet with the Interface board connecting via a USB Port on the side of Pi., the pc also connects via a usb connection.

The Allstar files are available for download from www.allstarlink.org This site is very handy as there is lots of information help and a forum to help answer any queries you may have.

After you have all the necessary parts for a node, you download the ASL files required for setup and copy on to your micro SD Card with a program such as Sdcard Formatter.

Place card into Rasp Pi and then turn the Rasp Pi on. The setup files will install to the Pi

More step by step instruction can be found here. Newsletter restraints so can't show all instructions.

https://wiki.allstarlink.org/wiki/Beginners_Guide

If you want to create a Node you will need to create a no cost account with www.allstar.org and obtain a node number from them first then you can start the creation process.

Please note: - A node can also be connected to a VHF/UHF Radio and your node can have a wider coverage area. Best example is if you have used a radio on an Echo link node, this is very similar but the technology is more advanced, audio is better quality also.

You can also have a Portable Node quite easily, use in your car with a mobile phone connection, also a portable battery pack to connect your Pi too

If interested in Portable node use, please see below:-

<https://www.youtube.com/watch?v=0VsNcQCjdwM>

Please note: - A Signalink USB is not suitable as a node device as this box does not control COS etc

This review is only a small basic view of Allstarlink, I don't want to confuse members with tech jargon and go too in-depth.

There are many ways of going portable with your Raspberry Pi setup please contact VK3NQS ,Colin (0434292732) for more information re portable use or anything to do with AllstarLinking.

Thanks for this info Jason (Editor)

Peter VK3AXI's list of books for sale.

Radiobooks Clearance List				
	RRP	Qty Available	Sale Price	Order
50 Projects for Radio Amateurs	\$50.00	1	\$25.00	
A Mind At Play	\$35.00	1	\$17.00	
A R R L Amateur Radio Station Mini Log	\$10.00	2	\$5.00	
A R R L Best Of The Doctor Is In	\$45.00	3	\$22.00	
A R R L Field Day Handbook	\$23.00	1	\$12.00	
A R R L Hands On Radio Experiments Vol 1	\$50.00	3	\$25.00	
A R R L Hands On Radio Experiments Vol 2	\$55.00	4	\$25.00	
A R R L Hands On Radio	\$45.00	1	\$25.00	

Experiments Vol 3				
A R R L Log Book Spiral Bound	\$17.00	14	\$10.00	
A R R L Log Mini Waterproof	\$15.00	5	\$8.00	
A R R L Operating Manual 10 Ed	\$65.00	1	\$32.00	
A R R L Operating Manual 11th Ed	\$60.00	3	\$30.00	
A R R L Small Antennas Small Spaces 2nd	\$45.00	1	\$22.00	
A R R L Yagi Antenna Classics	\$45.00	1	\$22.00	
Amateur Radio Essentials	\$40.00	1	\$20.00	
Amateur Radio Operating Manuel	\$35.00	3	\$17.00	
Amateur Radio Repeaters Services	\$50.00	1	\$25.00	
Antenna Topics	\$45.00	1	\$22.00	
Antennas For V H F	\$45.00	1	\$22.00	
Antennas Mastered	\$60.00	1	\$30.00	
Art Of Soldering	\$10.00	1	\$5.00	
Backyard Antennas	\$45.00	1	\$22.00	
Basic Antennas	\$65.00	1	\$32.00	
Basic Radio Understanding The Key Building	\$65.00	1	\$32.00	
Beginners Guide To Reading Schematics	\$35.00	1	\$17.00	
Bletchley Park People	\$25.00	1	\$12.00	
Build Your Own Low Power Transmitter	\$90.00	1	\$45.00	
Build Your Own Transistor Radios	\$85.00	1	\$42.00	
Building A Transceiver	\$60.00	1	\$30.00	
Capturing Enigma	\$25.00	1	\$12.00	
Care And Feeding Of Transmission Lines	\$45.00	1	\$22.00	
Circuit Overload	\$45.00	1	\$22.00	
Circuit Simulation And Analysis	\$45.00	1	\$22.00	
Complete D X Er 3rd Ed	\$45.00	1	\$22.00	
Computers In Amateur Radio 2nd Ed	\$40.00	1	\$20.00	
Digital Modes For All Occasions	\$50.00	1	\$25.00	
Edison And The Rise Of Innovation	\$60.00	1	\$30.00	
Electronic Project Building For Beginner	\$10.00	1	\$5.00	
Electronics Demystified	\$30.00	1	\$15.00	
Elimination Of Electrical Noise	\$20.00	2	\$10.00	
Emergency Power For Radio Comms 2nd Ed	\$35.00	1	\$15.00	
Energy Choices for the Amateur Radio	\$60.00	2	\$30.00	
Even More Out Of Thin Air	\$35.00	1	\$17.00	
G P S And Amateur Radio	\$23.00	1	\$11.00	
Getting Started In Amateur Radio	\$25.00	2	\$12.00	
H F Amateur Radio	\$35.00	1	\$17.00	

H F Dipole Antennas For The Radio Amateur	\$60.00	1	\$30.00	
H F S S B D X Basics	\$25.00	1	\$12.00	
Ham And Shortwave Radio For The Electron	\$40.00	2	\$20.00	
Ham Radio For Dummies	\$45.00	1	\$22.00	
Hamspeak A Dictionary For Radio Amateurs	\$30.00	1	\$15.00	
Hart Reviews Best Of Radcom	\$45.00	1	\$22.00	
Heil Ham Radio Handbook	\$50.00	1	\$25.00	
High Speed Multimedia For Amateur Radio	\$60.00	3	\$30.00	
Hints And Kinks Radio Amateur 18th Ed	\$45.00	1	\$22.00	
Homebrew Cookbook	\$55.00	1	\$27.00	
How To Use Oscilloscopes And Other Test	\$10.00	1	\$5.00	
International Antennas	\$55.00	1	\$27.00	
L F Today A Guide To The Success On The	\$45.00	1	\$22.00	
Listening To Ludendorff	\$30.00	1	\$15.00	
Low Band D Xing	\$115.00	1	\$67.00	
Morse Code For Radio Amateurs	\$25.00	2	\$12.00	
Morse Code Operating For Amateur Radio	\$25.00	1	\$12.00	
Nifty E Z Guide To Echo Link Operation	\$20.00	1	\$10.00	
Novel Antennas	\$50.00	1	\$25.00	
Old Time Radios Restoration Abd Repair	\$40.00	1	\$20.00	
Portable Operating For Amateur Radio	\$45.00	1	\$22.00	
Power Supply Cookbook	\$70.00	1	\$35.00	
Power Supply Handbook	\$50.00	1	\$25.00	
Propagation And Radio Science	\$60.00	1	\$30.00	
Q R P Basics 2nd Ed	\$50.00	1	\$25.00	
R F Design Basics	\$45.00	1	\$22.00	
R F I Book 3rd Ed	\$90.00	1	\$45.00	
R S G B Antenna File	\$70.00	1	\$35.00	
R S G B Rig Guide	\$15.00	1	\$7.00	
R T T Y / P S K 31 For Radio Amateurs	\$25.00	1	\$12.00	
Radio Amateurs Handbook	\$43.00	1	\$20.00	
Radio Amateurs Workshop	\$45.00	3	\$22.00	
Radio And Electronics Cookbook	\$100.00	1	\$50.00	
Radio Astronomer John Bolton	\$60.00	1	\$30.00	
Radio Auroras	\$25.00	1	\$12.00	
Radio Nature	\$40.00	1	\$20.00	
Radio Projects For Amateurs 2	\$20.00	3	\$10.00	
Radio Propagation Principles And Practice	\$50.00	1	\$25.00	
Radio Science For The Radio Amateur	\$45.00	1	\$22.00	
Radio Theory Handbook 5th Ed And C D	\$85.00	1	\$42.00	
Radio Theory Handbook Beginner	\$55.00	1	\$27.00	

To Advance				
Receiving Antennas For The Radio Amateur	\$55.00	1	\$27.00	
Reflections Transmission Lines And Antenna	\$60.00	1	\$30.00	
Restoring Old Radio Sets	\$35.00	1	\$17.00	
Riding The Shortwaves	\$45.00	1	\$22.00	
S W R Explained	\$20.00	1	\$10.00	
Short Vertical Antenna And Ground Radial	\$25.00	2	\$12.00	
Six & Four	\$60.00	1	\$30.00	
Stealth Antennas 2nd Ed	\$45.00	1	\$22.00	
Storm Spotting For Amateur Radio	\$35.00	1	\$17.00	
Superhet Radio Book	\$10.00	1	\$5.00	
T A B Guide To Vacuum Tube Audio	\$45.00	1	\$22.00	
Tower Climbing Safety And Rescue	\$60.00	1	\$30.00	
Transmission Line Transformers	\$50.00	1	\$25.00	
Transmitter Hunting Radio Direction Find	\$65.00	1	\$32.00	
Ultimate Scanning Guide	\$40.00	1	\$20.00	
Understanding Basic Electronics	\$65.00	1	\$32.00	
V O I P Internet Linking For Radio Amate	\$50.00	1	\$25.00	
Vertical Antenna Classics	\$45.00	1	\$22.00	
Vintage Radios Collecting Servicing Rest	\$45.00	1	\$22.00	
Vintage Valve Radios Restorers Guide	\$50.00	1	\$25.00	
Weekend Projects For The Radio Amateur	\$50.00	1	\$25.00	
Where Discovery Sparks Imagination	\$65.00	1	\$32.00	
Wireless From Marconis Black Box To The	\$32.00	1	\$16.00	
Work The World With J T 65 And J T 9	\$40.00	1	\$20.00	
Your Entry Into Amateur Radio	\$25.00	2	\$12.00	
Your First Amateur Radio H F Station	\$50.00	1	\$25.00	