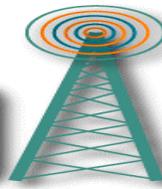


SADARC



SHEPPARTON & DISTRICT AMATEUR RADIO CLUB

Repeaters: VK3RGV 2m - 70cm - Packet.
Freq: 146.650 - 439.775 - Packet 147.575

Founded 1979

Incorporation No. A6677
P.O. Box 692 Shepparton 3632

REPEATERS VK3RGV 2m & 70cm
VK3RGV B D-Star
2m IRLP Node # 6992
CLUB CALL SIGN VK3SOL

President:- Peter Rentsch
Vice President:- Ed Roache
Secretary:- John Waters
Treasurer:- Ron Burns

VK3FPSR
VK3BG
VK3PXJ
VK3COP

Volume 7 No 1 November 2011

From the Editor

Thank you for your support over the period of time that I have been doing the Newsletter. This is my last Newsletter as Editor and it is with appreciation that I pass the job onto Les VK3TEX. Les will be writing the Newsletter but I will continue to do the printing and the distribution.

To those people that submitted articles and reports thank you for making my job much more enjoyable and I hope that you will continue to give Les the support that you gave me.

Don't forget our Christmas gathering at the Benalla Bowls Club on Sunday 4th December. Cost is approximately \$20.00 per person plus drinks at Bar prices. Commencement time is 11.30am for 12.00 noon. There is no need to book as Ron VK3COP has booked for the group already.

Thanks again everyone for your support and from me as Editor and my wife Karen we wish you all a very safe and Blessed Christmas and New Year.

Cheers & 73's

Peter.
VK3FPSR

Dairy Dates.

Sunday 4th December – Christmas Meeting. Benalla Bowls Club

Saturday 14th January – Executive Meeting Benalla – 11.00am Venue to be decided.

Saturday 4th February 2012 – Regular Meeting 1.00pm Mooroopna Scout and Guide Hall.

Sunday 12th February 2012 – Central Victorian Radio Fest - Kyenton

Saturday 3rd March 2012 – Regular Meeting 1.00pm Mooroopna Scout and Guide Hall

Sunday March 25th - EMDRC Hamfest - Heathmont

Saturday 7th April 2012 – Regular Meeting 1.00pm Mooroopna Scout Hall. This is Easter Saturday so we need to confirm the meeting.

From the President

Thank you for your vote of confidence in electing me as your president for 2012. I will endeavor to do the best job that I can but without members help it is impossible to do it all. Thank you also to the other members of the executive for taking up positions. I appreciate your support and your willingness to help. There are many projects that the Club can or has undertaken and there are many that can still be done. Prior to embarking on any new projects we need to tidy up some loose ends on existing projects.

As you can see from the Diary dates the executive will be meeting in mid-January to review the year that is before us. If you have any feedback for any of the members of the executive please contact them and talk to them prior to that date.

Our first meeting back in February will look at what Club members wish to achieve during the year and I will be looking for feedback from each and every one of you. The first part of the meeting will be the normal business session and after coffee we will have an open forum as to what the members want. Your attendance and feedback is very important to the success of the Club. This is your chance to have your say!

Included in this Newsletter are the minutes from the 2010 AGM and the 2011 AGM for your information.

That's it for me this time. So, for those that I will not see at Benalla, Karen and I wish you a very Happy Christmas and a Safe New Year.

73's

Peter
VK3FPSR
President SADARC

Announcements



50 Ohm RG213/U cable

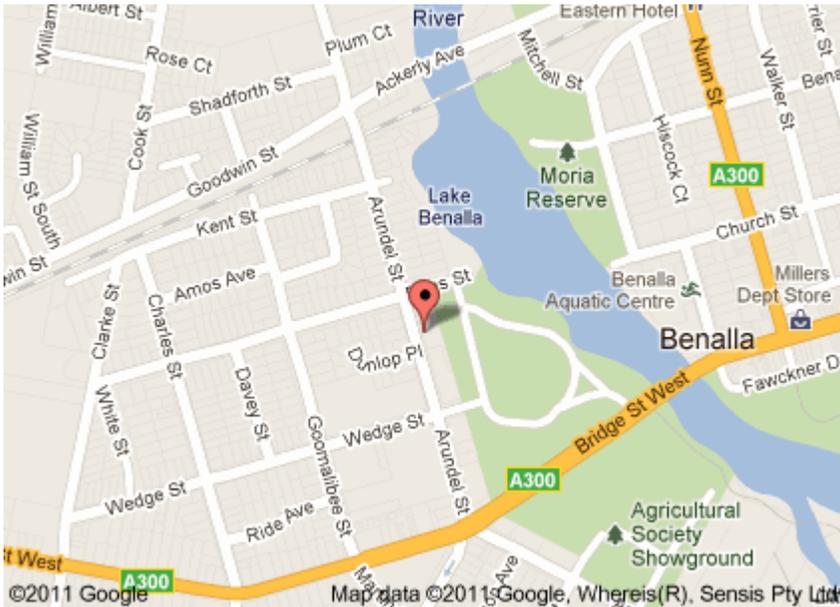
Specifications:

- Conductors: 7/0.75 + 216/0.12mm
- Roll length: 100 metres.

Jaycar have the pictured RG213 cable available. Financial members of SADARC can purchase this cable for \$2.80 per metre. (minimum purchase \$15.00)

Don't forget to Email your articles and reports to Les VK3TEX - lestatar@bigpond.com

To save the Club some money and to keep it simpler for the Newsletter distributor please let him know your Email address if you have not already done so Peter VK3FPSR - pages.cobram@bigpond.com



Our Christmas Luncheon will be held on Sunday 4th December at the Benalla Bowls Club. The address is 25 Arundel Street Benalla VIC 3672 (03) 5762 2094

Cost will be about \$20.00 per person with drinks at Bar prices. Commencement time will be 11.30am for 12.00 noon.

Ron VK3COP has organized the day and booked for approximately 30 people but more can be easily catered for. See you there for some great fellowship.

Thanks to David VK3ANP for the following article.

Resurrecting an Hidaka Tri Band HF Beam.

With the improvement in propagation conditions on the higher HF amateur bands my thoughts turned to reassembling my HF tri band beam which had been taken apart for storage quite a few years ago. The antenna is a Hidaka VS33 and I remember it had a good performance for a three element yagi on a 14foot boom.

The only information I had it was one badly pixelated page which showed the spacing's between elements, which were just readable, the length of each element was unreadable. Spacing between the traps (100mm) and the length of the tip extensions were clear enough to read but uncertainty remained about the rest. So a search on the net was needed. Unfortunately I could not find any other information than what I already had.

I erected it with my guesses just before winter and although it worked after a fashion it really gave me no satisfaction. VSWR was poor, it showed poor forward gain and the front to back ratio was not good. Nothing further was done over winter and my enquiries did not turn up any worthwhile information. With much better weather there was renewed interest and just recently I stumbled onto a website where a number of other VK amateurs were bemoaning the fact that they had tried but could get no information from Hidaka. However there was one response which suggested that the VS antenna was similar to the Hygain TH3. Typing that information into my search engine, led me to the manual for TH3MK4 antenna, a reading of which seemed to unlock the information I needed.

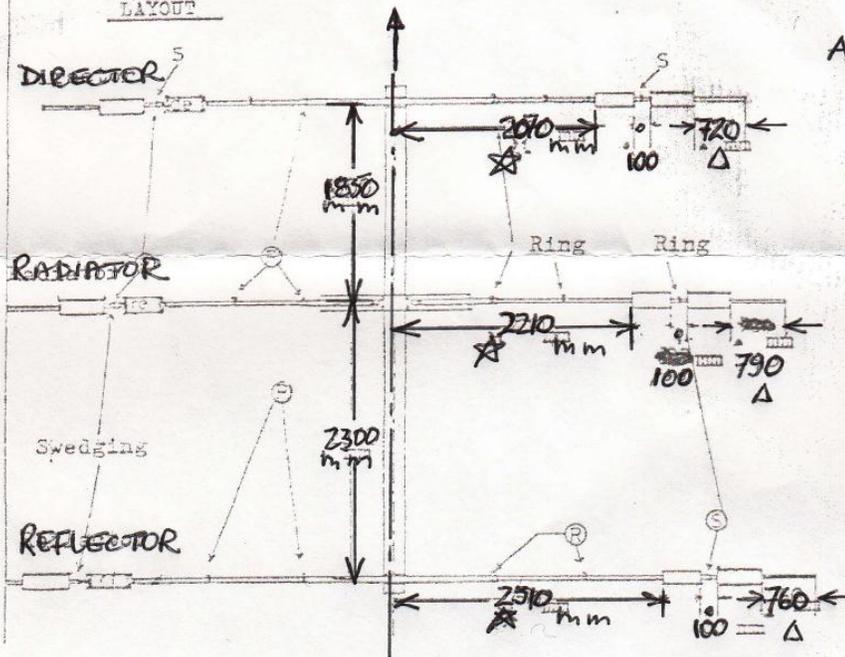
I changed everything to the TH3 measurements except the spacing between each of the traps and the end extensions which I kept as shown on the Hidaka sheet. All fell in to place and the antenna even a low height performed well. Interesting the spacing between driven element and reflector is much less than between D.E and director, just the reverse to what was shown on the Hidaka sheet. The very low VSWR on each band indicated that resonance was achieved. A huge improvement on what I had first tried and it worked well. I hope this information is useful to others who may have a similar problem. The website for the TH3 manual is www.thiecom.de/ftp/hygain/th-3mk4.pdf

I erected it up on my tower at 33 feet and it works very well on each of 20,15&10 metre bands. I have also now found a legible copy of the VS 33 and it is included for those who may have a Hidaka. Last Friday (11th November) I changed everything to the VS33 dimensions as per the sheet and I feel it is working probably better than the Hygain configuration. With good condx on the bands it is a delight to use. Good DX to everyone

David VK3ANP

SUPER-TRAP-BEAM-ANTENNAS VS-33 INSTRUCTION

LAYOUT



ALL DIMENSIONS IN M.M

ELECTRICAL SPECIFICATIONS

FREQUENCY:	14 MHz
GAIN:	8 db
F. B. RATIO:	Over 20 db
MAX POWER INPUT:	2 KW (PEP)
VSWR @ RESONANCE:	Less than 1.5
IMPEDANCE:	50 Ohm

CODE SPECIFICATIONS

S	= Swedging
R	= Ring Clamp
De	= Director Element
Re	= Radiator Element
Rra	= Reflector Element

MECHANICAL SPECIFICATIONS

Longest Element:	7.5 Meter
Boom Length:	4.5 Meter
Turning Radius:	4.455 Meter
Wind Load @ KPH:	108 KPH
Max. Wind Survival:	162 KPH
Net Weight:	15 Kgs
Mast Diameter:	38.1 - 50.8 Millimeter
Surface Area	0.79 square meters

14 MHz	Fone	14.25 MHz	CW	14.05
21 MHz	Fone	21.30 MHz	CW	21.05
28 MHz	Fone	28.5 MHz	CW	28.10

14.200
21.200
28.500

When used for CW exclusively, the assembly length of the boom elements and the coils should be:-

- ☆ Star Marks - Length to be held at 10 cm each for both elements
- Period Marks - Length to be held at 1 cm each for both elements
- △ Triangle Marks - Length to be held at 5 cm each for both elements

REPEATER ANTENNA SYSTEMS

We all want the maximum range possible out of our repeater system on top of Mt. Wombat or some of the other sites around the area. However, I'll concentrate on Mt Wombat and the 2 metre FM repeater antennas. Some time ago back in history a 9 dB gain antenna was purchased and installed on top of the 20 metre (or thereabouts) lattice tower near the hut giving a total height above the top of the mountain to the top of the antenna of around 27 metres. This antenna gave superb performance and it was believed it was the answer to a maiden's prayer! It did not last long as a fault developed in the antenna which has not been fixed to this date several years on. Various other antennas have been used set off from the side of the lattice tower lower than the 9 dB monster and with lower gains (claimed) between 0 and 6 dB above a dipole. They have all worked with varying success compared to the 9 dB unit - when it worked.

Now let's look at what is really required on top of Mt Wombat. Height above the ground is always important for a VHF or UHF communications antenna. Mt Wombat is 799 metres above sea level (ASL) and the lowest antenna is around 800 metres ASL and our horizon to the west is around 120 metres ASL. This means that the radio horizon is 107.5 km away. Now if we increase the height of the antenna by 10 metres we get a range of 108.3 km. And with the 9dB antenna at 20 metres it is 109 km. The thing to consider is, is it worth the effort of having the high gain antenna at the top of the lattice mast if we can't keep it in operation for a total gain in effective range of 1.5 km? This is an increase of range of around 1.3%. Is all the trouble we've had worth the endeavor to get that 1.3% extension in the radio horizon? I doubt it. The gain of the antenna is also quite important to obtain the best range. More easily accessed antennas off the side of the lattice mast as well as new antennas mounted on poles on the roof of the hut make for quicker and easier maintenance with little degradation of the signal. A spare antenna could be mounted on the extra antenna poles for easy substitution should a fault develop.

Certainly I'd really like to have the 9 dB monster overhauled if possible and reinstalled and down the track that may be able to be done. However, to be more practical let's put lesser gain (6dB seems a good compromise) antenna either off the side of the lattice mast or on top of the hut. We do have an antenna to go up there with a claimed gain of 6 dB which following testing should go up the hill and off the side of the lattice mast late this month.

Now some other figures of interest. It has been suggested that we look at a commercial antenna at a few thousands of dollars from an Australian manufacturer. These are good long life antennas which would last perhaps 30 years whereas the ones we may install will have a more limited life. These antennas can be obtained with a direct broadside radiation pattern or with a 3° down tilt in the pattern. A 9dB gain antenna will have a pattern with a 6° width -3 dB point pattern. I have used a program on my computer and have not found that a 3° down tilt will be any advantage to us; in fact it may make the performance at long range inferior. It is of course very important that the antenna be mounted within around a degree or two of vertical or the gain in various wanted directions may be well down.

Another thing to consider is the performance of your own antennas. On a vehicle with an antenna with a top height of 2 metres above the ground the radio horizon is 5.8 km away and at 3 metres it is 7 km. Your home station antenna may be at 10 metres above the ground and this will give a distance to the radio horizon of 13 km and if you have a 20 metre high antenna it will be 18.3 km. These distances are additive to the repeater range.

By way of comparison the 6 metre repeater uses a folded dipole that is just above the top of the mountain by perhaps a metre and it consistently outperforms the 2 metre FM repeater by around 20 km (115 km versa 135 km workable range). With the better 2 metre antenna we may well close the gap in performance range. The higher the gain and altitude of the repeater and home (mobile) antennas - the reliability of communications within the range (bad spots) and total range will be greater.

Rodney Champness VK3UG

I received this Email via the Website after the Hamfest.

AS everyone knows a visitor to the hamfest Michael Nowosad as in myself won the Hand held radio and has been happy with it and did the next week go out and get a foundation class licence and is now VK3FMAA and would like to thank everyone very much and would like to say what a great day it was Thank you

M J Nowosad=

A great outcome of our Hamfest. Peter VK3FPSR

JOTA

Recently some of our members were involved in the JOTA event. Jack sent the following photos to illustrate the value of the day. All of those attending were given the opportunity to talk on air and a great time was had by all.



The children's names that were in attendance were, Sarah 9 yo, Jake, Brianna 10 yo, Riley 9 yo, Jeremy, Nick 11 yo, Alana 13 yo, Billie 10yo and Caitlin.

Operators from SADARC present: Ian, Steve, Dave, Jacek.

Thanks for your help

Minutes from the SADARC Meeting held 5th November 2011

Meeting opened at 1pm. appologies Wayne VK3XQA ,Jan VK3ALF ,Bruce VK3FBGN Rob VK3ECH ,Alan VK3AO

Those that attended ,VK3COP Ron ,VK3BG Ed ,VK3DAG Steve,VK3MAC Robert ,VK3HBW Brian,VK3TEX Les, VK3FPSR Peter,VK3FALN Allan.VK3DSF Max,VK3PXJ John ,VK3VG Trevor.VK3BPH Kevin,VK3AHY Hilton,VK3ELV Phil,VK3CHV Ian VK3VCE Dave ,VK3PNFToby, VK3OV Pat.

Minutes of last meeting read ,moved the minutes of last meeting be accepted by Dave VK3VCE, seconded by Les VK3TEX

Buisness arising from the minutes. Crystal for 6 meter has arrived. Inward correspondent was presented to members. Station licence was received

Outward correspondent nil. Rod VK3UG presented a report on Mt Wombat. Toby VK3PNF reported D star is working well.

More support is needed for the 2 meter net on Sunday night

Treasurers report was tabled by Ron VK3COP. Moved the treasurer report be accepted was moved by Allan, VK3FLAN seconded by Dave VK3VCE

Two extra presenters for the 80 meter net are Les VK3TEX,and Dave VK3VCE.

Ron VK3COP spoke about the antennas not working at the club rooms.

Don't forget the Christmas break up at Benalla Bowls Club rooms Sunday 4th December.

Meeting was declared closed at 2.10pm.

Minutes of SADARC 2011 AGM 5/11/2011 3pm

All positions were declared vacant by the outgoing President Ed Roache.

Rodney Champness was asked to act as interim chairman for the purpose of the Election of officer bearers and reports.

The minutes of the previous AGM were accepted.

The Treasurer's annual financial report was presented and accepted by the meeting.

The election of officer bearers followed:-

President – Peter Rentsch VK3FPSR nominated by Ron VK3COP, Seconded by Ray VK3RW by proxy, Ed Roache VK3BG was nominated but withdrew. Peter was elected unopposed.

Vice- President – Ed Roache nominated by Ron VK3COP and seconded by Steve VK3DAG, elected unopposed.

Secretary/Public Officer – John Waters VK3PXJ nominated by Peter VK3FPSR and seconded by Steve VK3DAG., elected unopposed. Kevin Reid VK3BPH is prepared to assist John as necessary.

Treasurer - Ron Burns VK3COP was nominated by John Waters VK3PXJ and seconded by Ed Roache VK3BG and was elected unopposed.

Station Officer- Ian VK3CHV was nominated by Dave VKVCE and seconded by Steve VK3DAG. Elected unopposed.

Membership Secretary – Pat O’Shannesy VK3OV nominated by Jacek VK3TJS and seconded by Peter VK3FPSR. Elected unopposed.

Newsletter – Les Tater volunteered to do this with some help from Peter VK3FPSR. Peter will do the next newsletter then it will be taken over by Les. Please supply Les with articles or other information for the newsletter.

Technical Committee – Ray Wales VK3RW, Philip Dwyer VK3ELV and Rodney Champness VK3UG were nominated by Peter VK3FPSR and seconded by John VK3PXJ. Elected unopposed.

Toby VK3PNF will remain to look after the D-Star repeater.

Club net co-ordinator – Max Johnston VK3DCF (for 2m), and on rotation to other members for 80 metres.

Web Site – Barry Maskell was nominated to continue with the Website. As he was not present Peter VK3FPSR is to contact him to check if he is OK to continue.

Meeting closed as there was no further business.

Rodney Champness

As the minutes from last year’s AGM were not available at the meeting I have reproduced them in this newsletter.

Annual General Meeting For SADARC November 6th 2010.

Meeting opened by Toby VK3PNF at 14:15.

Present and apologies as for the November meeting.

Toby VK3PNF gave a brief Presidents exit speech and thanked all the members for their efforts in helping and supporting a very successful Club in the Goulburn Valley.

The members thanked the outgoing committee with a round of applause.

Toby VK3PNF declared all positions vacant and he chaired the meeting.

President: Dave VK3VCE nominated Ed VK3BG for the position of president. John VK3PXJ seconded the nomination. Carried. There were no other nominations for president.

Vice President: Les VK3TEX nominated Tibor VK3MRO in his absence. Tibor had already accepted the nomination previously and was aware of the nomination. Seconded by Ed VK3BG.

Pat VK3OV was nominated but declined. The position was filled by Tibor.

Secretary: After much deliberation, Toby nominated Steve VK3DAG to be the Secretary. Seconded by Terry VK3MAR. Carried.

Treasurer: Ron VK3COP decided to resume the Treasurers role and there were no objections to this. He was returned to the role.

Technical Committee: Ed nominated Rod VK3UG and Ray Wales for the technical committee. Toby VK3PNF put his hand up to look after D star. There were no objections from the members. The motion was carried.

Newsletter: Toby VK3PNF nominated Peter VK3FPSR for the position. There were no objections and Peter was elected.

Web site: Barry VK3AXX in his absence was keen to do the Web site and there were no objections to this. Motion carried.

Membership Secretary: Pat VK3OV was happy to continue in this role.

Public Officer: John VK3PXJ was nominated by Max VK3DSF and seconded by Max Matthey. Carried.

Awards Manager: This position was not filled.

Station Manager: Ian VK3CHV was nominated by Steve VK3DAG. Seconded by Dave VK3VCE. Carried.

Toby VK3PNF closed the meeting at 15:54 Hours.

Some humor:-

Help! (Les Biit)

Help, I hear somebody,
Help, not just anybody,
Help, you know I need that DX,
Help!

When I was younger, so much younger than today,
We never needed anybody's help in anyway.
But now those days are gone, I'm absolutely allured,
Now I find I've changed my mind, and hearing is secured.

Help me , I think I'm hearing noise
And I soon will lose to all DX-boys
Help me keep my score in honour roll,
Won't you please, please help me?

And now ham life has changed in oh so many ways,
Our self-esteem seems to vanish in the haze.
But every now and then I feel a bit insecure,
Is this right or have we been screwed?

Help me, I think I'm hearing noise,
Fifty receivers aren't but toys.
Help me get my P5 in the log,
Won't you please, please help me?

When I was younger, so much younger than today,
I never logged the DX right away.
But now the days are gone, I'm hearing everything,
Now I find we've lost our minds, ham hobby is vanishing.

Help me if you can, I'm tuning down,
And I will sell my rigs if you're 'round.
Help us get our mind clean 'n sound,
Won't you please, please help me?

Help me,
Help me,



These portable inflatable towers are everything you need to quickly put up your antennas/repeaters, video, or sensor payloads after emergencies or at large public gatherings. They're portable enough to mount on any vehicle so you can enhance your radio or mobile phone range on any remote operation. The COMET version will even put a high quality video camera 37 ft in the air. Our camera can be viewed and controlled from a computer or PDA from anywhere in the world!

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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. You do so at your own risk.