

BARC Newsletter

Volume 33, Issue 6

December 2012

Diary Dates

December	9 th	Christmas Breakup
January	25th	Business Meeting

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Club Net Frequencies

Due to interference to the HF net on 28.450 MHz the following procedure has been adopted. If 28.450 MHz is not available, the first clear frequency in the following list will be used, 28.445, 28.440, 28.455, 28.460 (i.e. down 5, down 10, up 5, up 10) The starting time is 8:00 pm. On Wednesday nights the normal frequency of 439.950 MHz will be used, This is a repeater and an input of 434.950 MHz will be used. The starting time is 8:00 pm.

Editorial

This is the last Newsletter for the Brisbane Amateur Radio Club this year. The main item to discuss is our Christmas social breakup to be held on Sunday the 9th December starting at 11.30 am at our Club room at Rochedale. Further details will be found within an article on this event in this newsletter.

What's New

The November Club meetings were well attended. Both the social and business meetings were enjoyed by our club members plus visitors who have now joined our club. The final club count for December shows that we have grown to twenty seven members.

The club activity still continues with more Saturday afternoon events. Last Saturday Jim came along and helped to run a new coax to be used for the 70cm club repeater. The tree close to the club house which was being used as a mounting point for one end of the 70 metre long wire had died and needed to be cut down. On Thursday afternoon three club members changed the mounting point to another tree to free up the dead tree for removal. Bill arranged for his son-in-law to cut down the tree. On Saturday a longer lead-in was run for connection to the ATU.

COMMITTEE MEMBERS

PRESIDENT

Kevin Dibble VK4ZR

VICE-PRESIDENT

To be Selected

SECRETARY

Peter Holtham VK4COZ

ASSIST-SECRETARY

Keith Adams VK4XAK

TREASURER

Les Parker VK4SO

LIBRARIAN

Peter Holtham VK4COZ

PROVIDOR

Jim Kelly VK4HJK

REPEATER OFFICER

To be Selected

STATION MANAGERS (VK4BA)

HF

Bill Scheele VK4TWS

Les Parker VK4SO

PROJECTS CO-ORDINATORS

Ron Everingham VK4EV

AWARDS & QSL MANAGER

To be selected

PUBLICITY & LIASON

To be selected

WICEN REPRESENTATIVES

To be selected

QSP NEWS EDITOR

Kev Dibble VK4ZR

CLUB EQUIPMENT OFFICER

Les Parker VK4SO

W.I.A. ACCREDITED EXAMINERS

Les Parker VK4SO

BARCFEST COMMITTEE

Les Parker VK4SO

CLUB MEETINGS

Meetings are held on the 2nd (social) and 4th (business) Fridays of each month at Rochedale Scout Den. 21 Rochedale Road Rochedale

No meetings are held on the 2nd Friday of January or the 4th Friday of December.

Visitors are most welcome to come along and Sample our hospitality.

MEMBERSHIP SUBSCRIPTIONS

Subs fall due on the last day of August and must Be paid by the 4th Friday in September

Current Standard Membership fee is \$20.00 (Subject to any changes prior to 31st August)

CORRESPONDENCE

All correspondence (except for items for the Club newsletter) should be addressed to:

The Secretary
Brisbane Amateur Radio Club Incorporated
P.O. Box 6106
Upper MtGravatt 4122 Qld.

Club Web Site <http://www.qsl.net/vk4ba>

Items for the Newsletter may be sent by mail to:

QSP Editor
. P.O. Box 6106
Upper Mt Gravatt, 4122 Qld..

or, by Email to:

vk4ba@qsl.net

Deadline is 5pm Monday prior to the 2nd Friday
Each month except January.

CLUB STATION NETS (VK4BA)

28.450 MHz. SSB Mondays 2000 hrs Local
439.950 MHz. FM Wednesdays 2000 hrs Local

CLUB ACTIVITY

There are a number of things that have happened since the last newsletter was published. The Scouts are making improvements to their building. Some areas are being painted. The guttering is being replaced. Some of the exterior walls are being upgraded.

All of these activities have resulted in the need for us to temporarily remove our VHF and UHF antennas. This has been done. To try and improve the performance of the club 70cm repeater it has been decided to use another method of connection to the vertical UHF antenna. A shorter run of coax will be used to reduce the loss in the coax between the repeater and its antenna. The antenna will be reinstalled on another mast which will result in the antenna being raised higher than before.

The battery used as a backup to power the repeater in the event of a power failure turned out to be faulty with a cell failure. The battery was under warranty so it had to be returned to Sydney for test before it was replaced under warranty. The battery has now replaced.

Activity on Saturday at the club room has been on almost every weekend and has continued since the club shifted to Rochedale. There has only been one Saturday when no one was available.

Just a reminder what has been achieved over the past five months.
.The library has been shifted and upgraded and the books available for loan have be sorted and filed. The console that was made by Manfred and used when the club was operating from Annerly has been returned to the club. Thanks to Dave Prince it is now in the club room and is being used to house the clubs Amateur Radio Transceiver plus power supply and Antenna Rotator ontrroller and other items that require security and still being available for ease of operation by the club.

The triangular tower donated to the club by Frank Barker has been removed from Franks QTH and brought to Rochedale. Thanks to Bill a suitable concrete base was constructed and the tower reconditioned. It is now fully operational. Thanks to Frank VanDoore the rotator and controller has been reconditioned and is now fully operational and is being used.

A 70meter long wire has been installed for use with the AH4 remote controlled antenna tuning unit in conjunction with the Yaesu FT-706MarkIIIG club transceiver. This was achieved by a large number of club members. Too many to list their names.

Bill and Peter went for a drive to the Gold Coast to disassemble all the antennas that were the property of Aussie Harris who became a silent key. The club put in a quote and was successful in purchasing these antennas. The next process was reconditioning and reassembly which took place over a number of weekends.

The tri-band three element yagi is now fully operational and was put into use for JOTA 2012.

Our digital projector has been used on a number of occasions to help some of the talks to be better presented.

Etolink has been set up so that anyone who has a computer and could not use the 70cm net on a Wednesday could log in to VK4RBA-L and join in via Echolink. Details of how to install Echolink on to a computer with internet facilities.

The next article was in the previous QSP but the date was incorrect.

Special Event 8th April 2013

The Club urgently needs a proficient operator who can send morse code at 20 words a minute to attend this event.

Earlier this year I was contacted by the Holland Park RSL re an event happening on 8th April 2013. I was invited to attend one of their meetings which I did attend .I then passed this information on to club members and it was agreed that we would participate in the event.

The event is a celebration of the 130th anniversary of the first ship to shore communication by radio in Australia. This coincides with an Australia wide reunion of naval personnel and will be a national event. What is required is a display of radio equipment and to send that message via Morse code throughout the morning and to contact other hams on the day.

What is required by us is to provide a cw operator and people to attend the display. The event will be held on 8th April 2013 from around 8am onwards. **The operator must be able to send morse code at 20 words per minute**

As this is a national event maybe we should apply for a special callsign for the day such as VI 130 or similar and maybe qsl cards for the event.

This event will take place at the Holland Park RSL hall or the adjoining Girl Guide hut

.The original Girl Guide hut was the building where the first message was received but was replaced with another building some time ago.

Please give this some thought and help to make this an event to promote amateur radio

Les VK4SO

Please give this event some serious thought. It is not until next May but we need to locate a suitable Amateur who can represent Amateur Radio Operators of Australia to participate . The 8th May is a Wednesday and the person will be required to attend the celebration at Holland Park on the morning and to operate a Transmitter at that site.

The Club will undertake to set up a station with facilities for operating and contacting other amateurs. The Clubs main concern is to find a member who can send at 20 words per minute and will be available on the morning of the 8th May at Holland Park.

At this stage we are not certain of the dignitaries who will be attending. It will be a national event so there could be some very important personnel there.

It will be a chance for Amateur Radio in Australia to get some sort of recognition.

A QRP Transmitter for 40 metres CW

I attended the Gold Coast Amateur Radio Society hamfest on 3rd November. I was looking for something different to take away and noticed some kits for sale at a very reasonable price. They were made by an American company, Vectronics.

All parts were there and the PCB was high quality. It took around an hour to mount the components and solder them into position. The good thing about the kit is all components are mounted on the board and there is no extra wiring required.

Having finished the kit where was I going to put it. A search of my collection of boxes both metal and plastic produced a metal instrument case that once housed a Fluke instrument. It was the exact width of the PCB. The case was too long but a short time with the hacksaw produced a case for the transmitter. I fabricated a front and back panel from some scrap plastic, drilled the holes in the appropriate spots and attached the panels to the case. I then turned to my trusty label maker and after a couple of attempts produced a reasonable label for front and back. As the label would not cover all of the plastic. I had to find something to cover the rest of the plastic. A bit of searching in the "Aladan's Cave" produced some left over pieces of adhesive backed thin felt. This was attached to the bottom half of the panels.

I have not tried the transmitter on air but I see no reason that it won't work.

I also have received a partial kit for a 40M ssb transceiver with 5 watt output.

The pcb is first class and should make up to a first class radio

You can find details of the kit on www.ozQRP.com. The kit is from Australia. Worth a look if you would like something to do during the coming holidays and have the enjoyment of using a transceiver that you have made yourself.

Les VK4SO

Kevin VK4WA came across the kit and decided to get one to see how easy it could be assembled.

He has finished the kit and reports that the receiver sensitivity is comparable to his main commercial transceiver.

He contacted me one Wednesday night after the club net and we had a HF contact when he did the comparisons between his receivers.

***** These pages are updated regularly, so please remember to refresh your browser. *****



'Extra bits' now available. See Shop page for more details.

Discover the thrill of making contacts with a rig you built yourself.



The MST (Minimalist Sideband Transceiver) is an easy to build and fun to use single sideband QRP transceiver for the 40M or 80M amateur bands. The MST transceiver follows a minimalist design making it inexpensive and simple to build yet still delivering excellent performance and being a pleasure to operate.

The MST PCB contains a complete transceiver except for a VFO. You can add a VFO of your own, as long as it has the correct frequency range and drive level, but to obtain best results it should be used with the companion DDS VFO. The DDS VFO offers drift free performance and features a clear backlit LCD display, selectable frequency steps and programmable IF offset.

MST Features:

1. Complete SSB transceiver on a single PCB (just add a VFO).
2. Superhet receiver using a 4 pole 10MHz crystal filter.
3. 5W PEP minimum power output using a rugged power MOSFET output stage.
4. Unwanted sideband suppression is typically 40dB.
5. All spurious transmit outputs below -45dBc.
6. AF and microphone gain controls.
7. Easy to adjust and set up.
8. Front panel LED transmit power and modulation indicator.
9. Plenty of audio output to drive a loudspeaker.
10. High quality double sided PCB with groundplane, solder mask and silk screen.
11. Simple and easy to build using all through hole components.
12. No complicated coil winding required. Uses inexpensive commercial coil assemblies for tuned circuits.

DDS VFO Features:

1. Stable frequency – no more drift!
2. Simple to operate using a single rotary encoder control with press button switch.
3. Bright 16 character by 2 line LCD display. Can be used with non-backlight display to reduce current consumption.
4. Output frequency range of 1MHz to 10MHz.
5. Selectable 1KHz, 100Hz or 10Hz frequency steps.
6. Tuning lock control.
7. Displays power supply voltage.
8. Programmable IF frequency. Ensures the displayed frequency is the same as the transmitted frequency.
9. Programmable IF offsets: Minus, Plus, None.
10. Draws only 80mA at 13.8V DC (with LCD backlight).
11. Spurious outputs at least -45dB.
12. Typically 300mV pk-pk sine wave output.
13. High quality double sided PCB with ground plane, plated through holes, solder mask and silk screen.
14. Simple and easy to build using through hole components apart from one SMD chip. To assist constructors the PCB comes shipped with the SMD chip already installed.

CQ Sprinklers!(reprint QSP 1995)

Most of us have experienced TVI, BCI and other forms of rf interference at various times, but here at I like to operate on 40 m cw in the evenings, trying to work into the USA to complete my Worked All States (WAS). So one evening recently I fired up the old TS520, heard a few stateside stations coming through, found a clear frequency and started to call CQ. Dah di dah dit, dah dah didah Dimly through the headphones I became aware of a clonk bangclonk bang, clonk clonk bang clonk which seemed to be in time with my sending. Was I coming through as a bass thump on my new neighbour's stereo? Head phones off, key down –clonk, key up - bang. Yes it's definitely me! Try again, key down - clonk, but this time I also become aware of the sound of running water somewhere around my house. Key up - bang, no running water sounds.

A bit of thought, hmm, this is a new one! Then it occurred to me. I had tidied up the wiring to the little microprocessor based sprinkler control which lives in the shack. The controller was now mounted on the side of my operating desk, just below the low pass filter instead of lying on the floor in a tangle of wiring annoying my XYL. Clearly r.f was getting into the controller and sending it beserk.

The nett result was that anyone peacefully walking their dog past my front lawn would have seen the astonishing sight of the pop-up sprinklers pulsating up and down in time to CQ CQ de VK4COZ! I wish could have seen it myself.

A temporary solution was simple - unplug the unit when transmitting and my PUI (pup-up interference) is gone. But I want to leave the system on, so I don't have to keep reprogramming it, and it has to be tidy to keep my XYL on side. So I just mounted the controller a bit further way from the rf. Given sufficient spacing between it and the LPF all my problems disappeared. The shack was tidy, I could get back to my WAS - 26 down, 24 to go, and perambulating locals need no longer fear they were seeing something from the X-files in suburban Chapel Hill!

Peter VK4COZ

BRISBANE AMATEUR RADIO CLUB BUSINESS MEETING 23 November 2012

The meeting was opened at 7:35pm by the President VK4ZR. Thirteen members were present: VK4TC VK4SO, VK4COZ, VK4HKJ, VK4XAK, VK4DS, VK4ACG, VK4OU, VK4TWS, VK4ZR, VK4AOK, Tim Holtom and Robert Hassell

Apologies

None

Minutes

The minutes of the last business meeting in August were taken as read.

Business Arising

None

Financial Report

The Treasurer tabled his report. The opening balance at 1st November was \$xxxxxxx. There was one membership of \$25.00 and expenses of \$xxx to Wishart Village News for magazine. The closing balance was \$xxxxxxx. Members were reminded we have \$xxxxxxx on term deposit.

Correspondence

The usual magazines have been received, AR, CQ, QST (December, some earlier months missing) and

Practical Wireless.

Reports

10m Net Bill, VK4TWS, reported the net is continuing to run well with 6 or 7 on most weeks.

70cm Net Les, VK4SO, reported on the usual 5 - 6 members checking in. The repeater will be shut down temporarily while cladding of the roof is replaced, the net will move to the old 146.55 frequency.

General Business

The long wire has been moved to another tree, the old dead tree will be cut down. The President reported we had been 5 months in the new venue, in that time a tower has been put up, and a 3-element

bean and rotator mounted on it . We participated in JOTA with HF and VHF and we know what to expect for next year.

There was discussion of the Christmas break-up and it was decided to go for Sunday 8 December from

1130 for barbecue lunch, bring salads etc. The club will provide the sausages.

This year's Barfest will be the 30th organised by the club. Assistance is needed on the day, with a roster

that must be made to work.

There being no further business, the meeting was closed at 8.05pm.

TECH TOPIC(Reprint QSP 1995)

Installing PL-259 connectors (various ways - Part 2)

The standard PL-259 installation procedure results in electrical and mechanical integrity, but it subjects the cable dielectric to high heat. I get around this by sliding a small piece of chewing-gum foil between the dielectric and braid after exposing the braid. The foil deflects heat from the dielectric during soldering. Use a high-wattage soldering iron (100 W or more) and good quality solder to tin the braid. Slide or screw the connector onto the cable. Next, heat the connector body (with that high-wattage soldering iron) and apply solder sparingly. (A high-wattage soldering *gun* with its tip removed works well at this step: Press the tip-support tubes against the connector and press the trigger. Result: Current from the gun passes through the connector, heating the connector directly. Be sure you apply sufficient pressure to the gun before pressing the trigger or sparks may fly!) Connectors installed in this manner have outlived the cable on which they were installed.

Another Way of Installing PL-259 Coaxial Connectors

I have always considered it a challenge to ensure a positive braid connection to coaxial connectors until I developed this technique: Notch the back edge of the connector or reducer with a file. Then, solder the twisted shield braid to the notch.

For RG-58, RG-59 or "Mini 8" cables, file a single notch in the reducer (UG-175 [RG-58], UG-176 [RG-59, Mini 8] or equivalent). When using larger cables, file two diametrically opposed notches in the rear of the connector barrel, comb out the braid wires, separate them into two bundles and solder one bundle to each notch. Cut off the excess braid with side cutters and file the joint(s) flush. Sample assemblies are shown in Fig 2.

Art Zavarella, W1KK - Agawam, MA

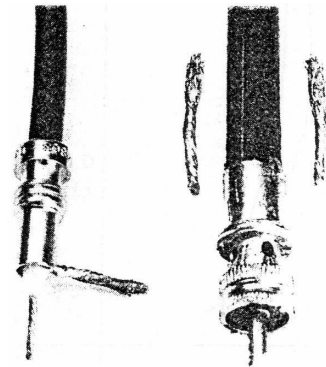


Fig 2—Art Zavarella's PL-259-installation hint. Left: Mini-8 foam-dielectric cable installed in a UG-176 reducer. This assembly is ready for removal of the extra braid wire (one bundle) that protrudes from the bottom edge of the reducer. At right: a PL-259 installed on RG-8 cable. The extra braid wire (two bundles) has already been cut off and the solder joints have been filed flush. For outdoor use, be sure to seal the cable jacket to the connector with epoxy or RTV sealant. See text. The time honoured method of terminating a PL-259 coax connector when using a UG-175 or UG-176 reducer has always bothered me, particularly with regard to the amount of heat

necessary to melt the solder for a reliable connection. The method in question involves folding the braid back over the sleeve of the reducer, then turning the reducer into the body of the PL-259 and applying solder through the holes in the PL-259. The PL-259 has to get mighty hot before solder will flow into it properly.

I discussed this method, and my doubts as to the wisdom of applying so much heat to the assembly, with a friend of mine. He told me of *his* method, which is much simpler and safer. I've since used his idea myself and found it to be everything that he indicated.

To use this method, tin the very end of the UG-175 or -176 reducer (the threadless end) and slip the reducer onto the cable. Strip the cable back as in the standard method (see *ARRL Handbook*). Next, *don't* fold the shield braid back over the reducer as in the standard method. Instead, unbraid the shield with a pointed tool so that it fans out radially from the centre conductor. Tin the fanned braid from the centre outward for about 1/4 inch. Using diagonal cutters, trim the tinned braid to within about 1/8 inch of the cable jacket. Slide the reducer up to the tinned braid. Using moderate heat, solder braid to the tinned end of the reducer.

Strip and tin the cable centre conductor as called for in the standard PL-259 assembly method. Using two pairs of pliers - one on the reducer collar and the other on the PL-259 body - turn the reducer/cable assembly into the PL-259 as tightly as possible. Solder the cable centre conductor to the PL-259 pin, and the job is finished - in half the time necessary to do it using the standard method, I'll bet! (If you feel that a soldered bond between the reducer and the PL-259 is necessary, solder the joint at which the reducer and connector body meet. This step should not be needed, though, if you turn the reducer into the PL-259 tightly enough) There's a further advantage to using this method: The PL-259 and reducer can be disassembled and reused with a minimum of bother. If you give this method a try, I think you'll like it as much as I do. In fact, it almost makes PL-259 installation fun! (Well, I did say almost.)

Dave Miller, K9POX - Niles, IL



The Above QST December 2012 is available from the BARC Library.

Please feel free to borrow any of the books that are in the library that can be borrowed.

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BARC CHRISTMAS PARTY 2012

Sunday afternoon 9th December 2012

All Club Members, friends, and their families are invited to come to our Christmas Break-up to be held

On Sunday 9th November starting at 11.30am at the Rochedale Scout Hall at 21 Rochedale Road Rochedale.

A sausage sizzle will be provided by the club

Please come along with your own drinks and something sweet.

Please advise if you intend to come along and enjoy the social event so that the club can arrange the catering.

An idea of the number of people you will be bringing will help to ensure there is plenty of food available.

Please contact one of the committee members by Wednesday 6th December or simply send an Email to VK4BA (our email address is on page 2 of this newsletter)

vk4zr@qsl.net

Below is a URL which will provide you with a small gift for Christmas,

Hopefully you should be taken to a website and enjoy the experience.

You may have to download adobe flash player to open the article. You will be told if this is necessary!! Enjoy!!

www.jacquielawson.com/viewcard.asp?code=1560479383964&source=j1999