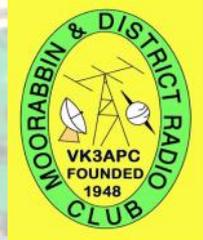


APC NEWS



In this issue:
**Amateur Radio in
Schools**
A Member Built it
SOTA Conference
Club Info.
Events Calendar

Left. Peter VK3YE operating AM on 160 m at The VK3 SOTA Conference. See story commencing on page 12. Photo Ian VK3IFM



Ian VK3XI has completed a refurbishment of the Club's AR7 receiver. Next issue will have the details.

It will now be possible to allow visitors to listen to one of the classic communications receivers of all time.

Here the Museum curator, Colin, VK3UDC is all smiles as he listens to Radio New Zealand booming in.

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BUILT SOMETHING?

BEEN SOMEWHERE?

DONE SOMETHING

INTERESTING?

Tell the Editor. He needs material for the next issue of APC News. Please include pictures too.

Email: vk3apc@wia.org.au

THE EDITORS DESK - Ron VK3AFW



This is our first issue for 2017.. I hope the festive season was enjoyable for you.

The WIA Board election is coming up and I urge you to research the candidates before voting. If you want to change some of the practices then none of the incumbents should get your vote. If after reading the information put out by past treasurers and directors you think the Board is doing fine, then vote for them. My view is that even when things are going well an ordered change of people is essential to keep the vitality and effectiveness of the Board going. New faces bring new ideas, some excellent, some not so good. Selecting the best ideas is the Boards job.

Our Club's committee is up for election not too far away, so it's not too soon to think about how you can help the Club.

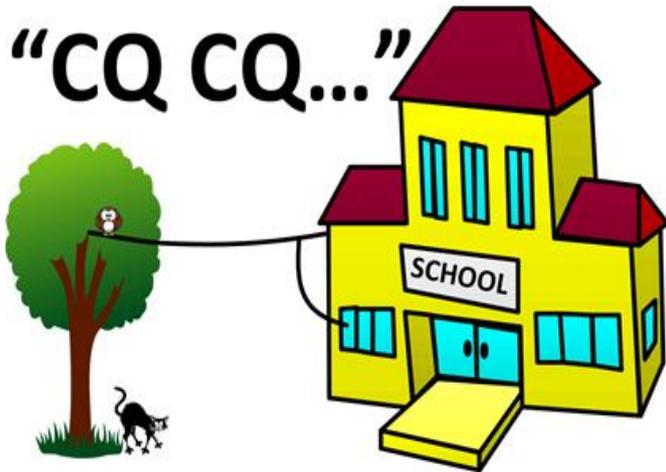
We have some Club activities coming up and as always we need personnel to execute the work. The more who are involved the easier the job gets and the more fun everyone has. Our first one for the year was the now Annual VK3 SOTA Conference. There is a brief report on it in this issue. The only complaint I heard was from one gent who thought our tomato sauce was too bland. I had neglected to put out the chili sauce bottle. Apparently some like it hot.

Don't forget to send in your contributions for APC News. 73, Ron, VK3AFW

SCHOOL AMATEUR RADIO CLUBS

A presentation by Julie VK3FOWL and Joe VK3YSP.

The first Club Friday night talk on 10th February was an inspirational presentation by Joe and Julie. They kindly provided this article.



SCHOOL AMATEUR RADIO CLUB NETWORK WWW.SARCNET.ORG

Julie and Joe described a very comprehensive and successful program for the activation of primary school amateur radio clubs. Julie, who runs the SARC program at three primary schools in Melbourne, said “The children can’t get enough of the radio club and there is a waiting list to attend the weekly sessions”. Joe, who provides technical support and promotion for the clubs, said “All that is required now is for other amateur radio operators to start their own clubs”.

SCHOOL AMATEUR RADIO CLUBS cont'd



"We love Radio Club"

SCHOOL AMATEUR RADIO CLUBS cont'd

Their presentation covered the setup and operation of a club and it presented actual feedback from principals, teachers, parents and students highlighting the educational and inspirational virtues of this fun activity for girls and boys alike.



School Principal, Mr. Michael Day, (see left) is quoted as saying: “It is interesting that in this day and age of mobile broadband networks and social media that Amateur Radio, the pioneering radio hobby of the last century, would be an excellent way of introducing science and technology to young children today. Amateur Radio enthusiasts are an amazing, untapped resource for educators. They are hidden away in every community, and can provide their own equipment and expertise. They also have a zeal to pass on this technology to the next generation. And, I would say, their aging ranks could do with some new recruits from us. So, this largely free and enriching collaboration between the schools and the Amateur Radio fraternity is a classic win-win situation.”

SCHOOL AMATEUR RADIO CLUBS cont'd

Joe said “The purpose of SARC is to encourage interest in Science, Technology, Engineering and Mathematics (STEM) subjects among the very youngest students using the resources of Amateur Radio. It is not a Foundation Licence course. It is taking an interest in the next generation; giving something back to the community and one of the most worthwhile applications of Amateur Radio.”



Above: Joe VK3YSP and Julie VK3FOWL

SCHOOL AMATEUR RADIO CLUBS cont'd

The presentation raised many important points including:

- 1 Safety of children is of utmost importance.
- 2 First contact between Amateur Radio and youngsters must be a positive, fun and uniquely inspiring experience.
- 3 Experience in working with children, session planning and practice are all essential.
- 4 Amateur Radio operators starting a club must “fit the profile” by being very patient and supportive; understanding the needs of individual students and providing praise and encouragement in spades.
- 5 Typical equipment required and antenna installation.
- 6 How Amateur Radio clubs can support and promote the activity.
- 7 What the WIA can do and changes required to the Amateur LCD to support SARC operation.

SCHOOL AMATEUR RADIO CLUBS cont'd

Julie and Joe's program is called the "School Amateur Radio Club Network" (SARCNET). They have provided a web site (www.sarcnet.org) full of free, on-line resources for anyone thinking of starting their own club, including: News, activities, missions, awards, projects and FAQs. SARCNET is also a lunchtime net on 40m, 7100kHz, between 11am and 12pm, Melbourne time, every day except Tuesday. They extended a warm invitation to anyone interested in helping youngsters with their first on-air experience.

The pair said "Our vision is that one day School Amateur Radio Clubs will enjoy many of the benefits that other Amateur Radio clubs take for granted like having their own regular on-air nets, contests, hamfests, field days, conferences, newsletters and a regular column in Amateur Radio magazine. We hope that SARCNET will become a nationwide programme supporting all School Amateur Radio Clubs, providing consistent guidelines and free on-line resources to all SARC operators."

For more information please email info@sarcnet.org.

|

CLUB EQUIPMENT

Ian VK3XI has generously donated a hand held multimeter to replace the missing Fluke benchtop multimeter.



SOTA CONFERENCE

The fourth VK3 annual SOTA conference was held on 11th February 2017 at the Club Rooms of the Moorabbin and District Radio Club, 31 Turner Road, Highett. There was no registration fee and only a nominal charge for a sausage and a can of drink.

There were 32 attendees from around the state and from over the Murray River border. The little club room was packed.



SOTA CONFERENCE cont'd

The doors were open at 9:30 AM for a free welcoming coffee and tea. The talks began at 10:00 AM with Andrew VK3ARR, one of only two regional representatives of the SOTA Management Team, giving a run-down of summit updates. Software is used to locate potential summits with final checks being made by examination of detailed maps. New summits are to be added for most VK regions this year.

A more detailed analysis of VK statistics by band and mode was presented by Wayne, VK3WAM. Activity seems to have levelled out after some rapid growth. The low sunspot count has seen a reduced reliance on 40 m and more on 2 m and surprisingly 15 and 10 m where sporadic E has played a role.

At 11:00 AM there was an exodus to the park outside where Peter VK3YE demonstrated his simple 160 m vertical. A very solid contact over 50 km was made using 10 W of AM. The antenna cost, excluding the squid pole, would be less than \$10. See front page for a photo.

SOTA CONFERENCE cont'd

Many of the attendees took advantage of the few minutes before the next session to load up on caffeine again. Glen VK3YY gave a warts and all users report on the Elecraft KX2. This is a Software Based Transceiver in a small box with most of the features and capability of the KX3. It is HF only and weighs in at half the weight of an FT817 but with more features and better performance. The hand microphone supplied came in for some criticism and Glen has replaced his. With 10 W output and inbuilt ATU and battery it is a formidable little rig than can be slipped into a coat pocket.

A few savvy activators have been using VK port-a-log, an application for Android tablets or phones. The creator Peter VK3ZPF gave a very intriguing presentation showing how it simplified log keeping and general operating when away from home. The pencil and pad log scribble is now consigned to history. It's not just a log program for SOTA, WWFF or Shires portable operation, it can send and receive spots, given phone coverage at the site. It is a fully developed feature rich application in world-wide use. Just Google for the Yahoo site from which you can download the app.

SOTA CONFERENCE cont'd

The last speaker was Peter VK3PF with a talk titled “40 m is not working, again!”. Being a VHF/UHF/Microwave operator from way back it was not a surprise that Peter concentrated on using the bands above 50 MHz. His 6 element 2 m beam using the top two sections of a squid pole is an elegant solution to a light weight beam for the bush basher.

In the meantime Tony VK3CAT, the Club's resident BBQ expert had cooked up a pile of excellent sausages with onions. These were eaten with relish, and tomato sauce, by a hungry throng.

Several other SOTA antennas were erected including a kite for 80 and 160 m. Actually the day was too balmy to allow a launch but most peaks have adequate breeze most of the time. Joe VK3YSP set up on JT65 to show that even though the bands sounded dead it was possible to hear ZL, VK5 and VK6 on 20 m at lunch time. He then proceeded to run 100 mW and have a QSO with a VK4.

SOTA CONFERENCE cont'd

Some plans for testing new 4WD and camping gear were hatched in between munching sausages. Marc VK3OHM, Allen VK3ARH and Peter VK3ZPF were seen talking about the working of the Local Government Area and Summit ID look up App on parksneaks.org and all three went home and are now writing new code to make it even better. This shows the value of face to face networking at events like this.

Also available at the venue were some almost new 2 man tents of the instant erect variety to help activators stay dry and warm. 7 m heavy duty squid poles were also on sale and a number of happy attendees were seen with both a tent and a new squid pole.

All talks will be published (pending on receipt of material from presenters) in the Files section of the Yahoo SOTA Australia Group, which is https://au.groups.yahoo.com/neo/groups/SOTA_Australia/files/

Thanks to Tony VK3CAT and Ken VK3KIM for assisting with the organizing, Tony VK3CAT for the catering and cooking, Ken for handling the finances in the absence of the treasurer and the Southern Fly Fishers for the loan of their BBQ.

Next year will be bigger and better.
Ron, VK3AFW

EVENTS CALENDAR



CLUB EVENTS FOR 2017

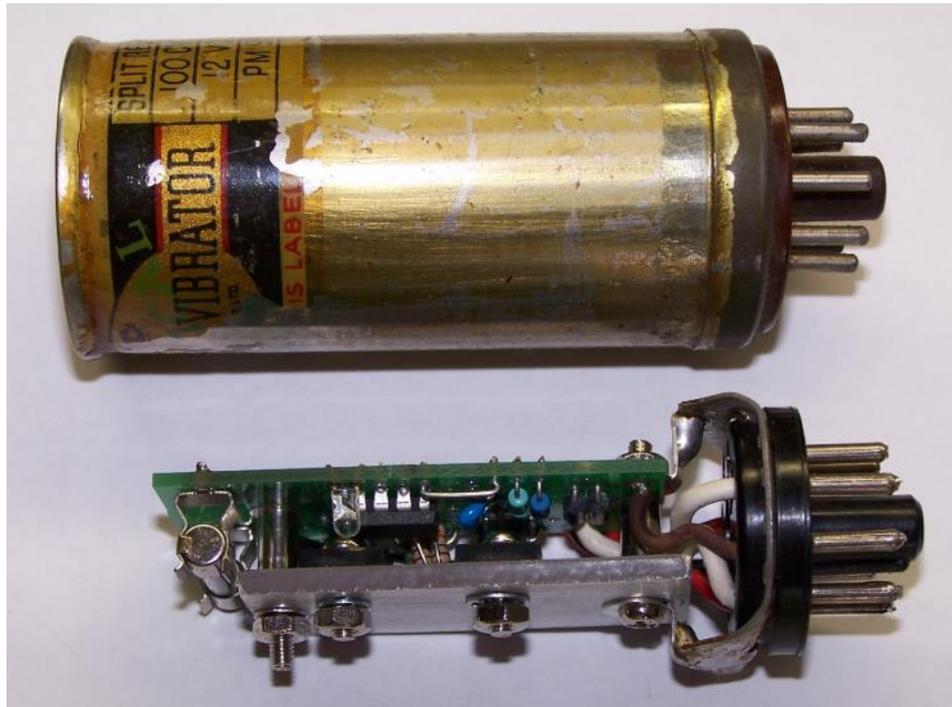
The following events are in addition to the normal weekly and monthly meetings. They include the events the Club normally undertakes plus all WIA sponsored events for which there are dates. If you know of an event that should be added please email the editor.

EVENTS CALENDAR

| EVENT DATE | EVENT NAME |
|---|--|
| 25 th , 26 th February | Mt Hotham SOTA Weekend |
| 18 th , 19 th March | John Moyle Field Day |
| 6 th May | M&DRC Hamfest |
| 6 th May 10:00 -11:46 UTC | Harry Angel Memorial 80 m Sprint |
| 13 th May | Jamboree on the Trail |
| 19 th , 20 th , 21 st May | WIA AGM Harndorf SA |
| 17 th , 18 th and 24 th 25 th June | International Museums Weekends. |
| 24 th , 25 th June | VHF UHF Winter Field Day |
| 12 th , 13 th , August 2017 0300z to 0300z | Remembrance Day Contest |
| 00:01UTC 19 August to 2400UTC 20 August 2017 (48 hours) | International Lighthouse Lightship Weekend – ILLW. |
| 26 th August | ALARA Contest |
| 8 th , 9 th , 10 th , 11 th September | ALARA Meet, Cairns. |
| 9 th , 10 th October 0800 UTC Saturday to 0800 UTC Sunday | Oceana DX Contest, Phone. |
| 16 th , 17 th October 0800 UTC Saturday to 0800 UTC Sunday | Oceana DX Contest, CW |
| 20 th , 21 st , 22 nd October | Jamboree on the Air. |

AN M&DRC MEMBER BUILT IT

By Ian Keenan VK3XI



***An Electronic
Vibrator re-
placement.***

See photo on left. At the top is the original mechanical vibrator and below it the MOSFET version. They are directly inter changeable.

AN M&DRC MEMBER BUILT IT cont'd

Ian Keenan VK3XI writes - This project had been at the back of my mind for some years I finally got round to doing something about it !

You may recall vibrators were used in 6V and 12V battery powered valve radios to generate the high tension, such as in car radios and communication equipment before transistors !

I have some old 12 volt DC transceivers that use synchronous and non synchronous vibrators depending on the power supply circuit requirements. The MOSFET Vibrator kit can be set up in either configuration.

There is a 160 metre AM net on every week day on 1825MHz at 11:00am. I usually listen to the net on a vintage military transceiver from the WW2 era. I came to the conclusion that having the vibrator buzzing away for the hour or so the net was happening was getting a bit annoying.

I had seen the MOSFET vibrator kits available from a member associated with the HRSA (Historical radio Society of Australia Inc - Victoria). So I sent off my money to obtain two version 1 kits earlier this year.

AN M&DRC MEMBER BUILT IT cont'd

The details and construction are featured in The HRSA magazine "Radio Waves" No.110 October 2009.

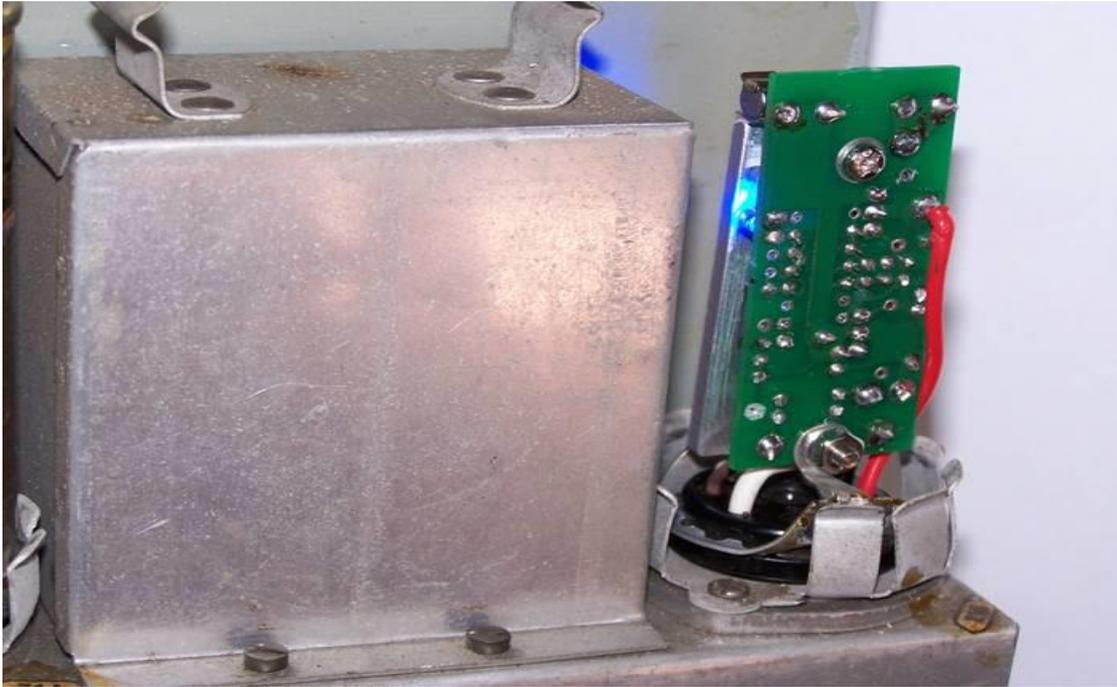
The kits arrived and I proceeded to assemble them. There are two switching power MOSFETS controlled essentially by a multi vibrator IC. There is also a blue LED on the board which acts as a voltage regulator. It permits operation on 4, 6 and 12 volts without any adjustment. It is also a useful power up indicator.

The KIT contains all the electronic parts and the circuit board. All that is required is some small metric M3 screws, 5 mm and 10mm long together with some locking washers and suitable spacers. If the unit is going to work in high current applications it would be an idea to fit a small heat sink to the MOSFETS. A suitable one can be made from a small piece of flat aluminium 48 X 20 X 1.6 mm.

In my case, the original vibrator pin out was to an octal 8 pin plug. I wired the MOSFET unit to an 8 pin octal plug so now both units are interchangeable. Refer picture of the two units. The wiring is usually run out from the solder side, but in my case I made an exception to neaten up the connections to the octal plug. Carefully work through the wiring to ensure there are no power up disasters. There is a fuse on the MOSFET board.

AN M&DRC MEMBER BUILT IT cont'd

which makes it reasonably forgiving if there is a wiring error.



Left:
MSOFET vibrator
plugged in and op-
erational. Note the
reassuring blue
LED in operation.
All is well?

AN M&DRC MEMBER BUILT IT cont'd

I have built a couple of these units and they have been working fault free for months now. In my application there is very little heat generated by the device and if you so desired it could easily be mounted in side the original vibrator can with a suitable mylar or card sleeve.

I chose not to, after all its not the same as the original (probably much better !). For any future owners of the radio equipment they can see exactly what has changed or been modified at first sight.

In conclusion - The MOSFET version 1 Vibrator kits are available from Tony Maher - tma-her@ detection.com.au. They are around \$22 plus postage. Tony advises he is happy to provide an EMAILED copy of the original HRSA article with detailed construction with any kit order when asked.

If you have some noisy buzzing power supplies in your shack try one of these !

Good Luck

Ian VK3XI

LIKE TO JOIN US AT THE M&DRC?

**Annual Membership Fees are due 1st July.
Prorata payment for new members in first year**

| Schedule of Fees (Annual) | Amount |
|---|---------|
| Joining Fee | Nil |
| Annual Membership Fee, standard | \$45.00 |
| Student, Retiree, Pensioner Annual Membership Fee | \$40.00 |
| Family Membership Fee | \$60.00 |
| Honorary and Life Members Membership Fee | Nil |

Send your application with cheque† to:

The Secretary M&DRC
Box 58,
Highett,
Victoria
Australia 3190.

PAYING SUBSCRIPTIONS

Paying by computer.

Go to **Internet Banking** on your computer and select the account from which you want to make the funds transfer. Do not select a Credit Card Account. In the “Transfer Money” screen enter the following.

- 1 In the ACCOUNT NAME box to which the funds are to be transferred, enter MOORABBIN AND DISTRICT RADIO CLUB INC
- 2 In the BSB box enter the number 033-385
- 3 In the ACCOUNT NUMBER box enter the number 77-4955
- 4 In the TRANSACTION DETAILS or ACCOUNT DESCRIPTION box enter your name or Callsign in uppercase.
- 5 Email the treasurer to advise of your payment.

Paying by cash over the counter at the bank

Go to a **Westpac bank** and fill out a deposit slip as below. Take this plus the necessary cash to the teller.

- 1 In the FOR CREDIT OF box enter MOORABBIN AND DISTRICT RADIO CLUB INC
- 2 In the BSB box enter the number 033-385
- 3 In the ACCOUNT NUMBER box enter the number 77-4955
- 4 In the TRANSACTION DETAILS or ACCOUNT DESCRIPTION box enter your name or Callsign in uppercase.
- 5 Collect the receipt and email the treasurer to confirm payment.

M&DRC MEETINGS, ACTIVITIES AND SPEAKER SCHEDULE 2017

| MONTH | DATE | SPEAKER | DATE | ACTIVITY |
|-------|----------------------------|---|------------------------------|--|
| March | Friday 10 th | Amateur Digital Television, Peter Cossins VK3BFG | Saturday 25th | HF antenna rebuild working bee. |
| April | Friday 14 th | Easter Friday No meeting | Saturday 22 nd | HF antenna rebuild working bee. |
| May | | No Meeting, Hamfest next day. | Saturday 27th | Informal meeting. Room and garage clean up and natter |



there or



TRADE DISCOUNTS

FOR CLUB MEMBERS at ALTRONICS and JAYCAR.

Moorabbin and District Radio Club Inc. members can now buy over the counter at Trade prices from both **Altronics** and **Jaycar**. When making a purchase ask for Trade Discount and for **Altronics** quote the Club's Trade account number **32323** and your **call sign** or for **Jaycar** quote Customer Number **45400209**. **This is NOT a charge account so you use your money.**

Note: Minimum purchase of \$20 may apply.

Check out these companies at their websites.



<http://www.altronics.com.au>



**Get your Club photo ID
discount card NOW**

<http://www.jaycar.com.au>

CLUB NETS

VHF net.

Wednesdays: **146.550 MHz FM**
Starts at 20:00 (local)

HF net

Wednesdays: **3.566 MHz (± QRM) LSB.**
Starts at 20:30 (local).

Note: this is in recess but do feel free to come on and call.

Drive Time net

Week days: **146.550 MHz FM**
Starts at about 16:40 (local)

Please drop in and join the Nets and catch up on the latest happenings around the Club.



D- STAR repeaters are now operational.

For more information about D-STAR go to the Club's web page **www.mdrc.org.au** click on the link to Susan VK3ANZ's Newbies Guide to Using D-STAR

CLUB MEETINGS

Formal Meeting.
*Second Friday night of the
month, 8:00 PM and*

Informal Meeting.
*Fourth Saturday morning of the
month 10:00 AM*

**Check the web site and the
weekly Club nets for the latest
doings.**



COFFEE GROUP.

**Every Tuesday morning -
10:00 AM to 11 AM.**

Retired? Come along, swap
yarns, bits of gear and info or
get helpful advice all with a bis-
cuit and a cuppa.

**Visitors are always
welcome.**

**Free disposal items for
financial members at most
meetings**

COMMITTEE MEMBERS AND OFFICE BEARERS

| | | |
|-------------------------------|---------------------------------------|------------------------|
| President: | VACANT | |
| Vice President: | Lee VK3GK | |
| Secretary: | Ken VK3KIM | millisk@hotmail.com |
| Treasurer: | Brian VK3MCD | bmcderm@tpg.com.au |
| Committee members: | Gerard VK3GER | |
| | Graeme VK3GL | |
| | Mike VK3FRTM | |
| Combined Clubs Reps: | Ian VK3IFM and Ken VK3KIM | |
| Publicity Officer | Various | |
| Repeaters | Graeme VK3GL | |
| Webmaster: | Cohen VK3HCL | |
| Museum Officer | Colin VK3UDC | |
| Speaker schedule | Gerard VK3GER & Ron VK3AFW | |
| Education and Training | Graeme VK3GL | |
| Station Officer: | Tony VK3CAT | |
| QSL Cards | Denis VK3BGS | |
| Librarian: | Ben VK3FBCN | |
| Magazine Editor: | Ron VK3AFW | vk3afw@optusnet.com.au |
| Assistant Editor: | Cohen VK3HCL | |