



The PROPAGATOR



Illawarra Amateur Radio Society Inc.

The monthly newsletter of the Illawarra Amateur Radio Society Inc.
Registered by Australia Post publication number :- NBH - 1491.

Meetings are held on the second Tuesday each month (except January) at 7.30 pm in the
State Emergency Services building in Montague St, Nth Wollongong.

Visitors are most welcome.

VOLUME 92, NUMBER 5

MAY 1992

EDITORIAL COMMENT

Inside this month's bumper issue of the Propagator, we have lots of the usual stuff, as well as some not so common things. Over the last couple of months, the Committee has been considering changes to the Rules of Association of the Society in an effort to bring the rules into line with the way that the society is actually run. Inside is a description of the changes.

Don't forget that the Annual General Meeting is only a couple of months away, and several jobs will be up for the taking this time around. I know that there will be a hole for an editorial type person, because my creativity has worn pretty thin after almost 22 issues. Start practising now.

Also this month, we see a new direction with the publicity of the Society and amateur radio in general in the Illawarra, with the display at the Uni Science Centre. This might even bring a few new faces into our midsts.

PROGRAMME

We again print the program up as far as will fit on the page:

MAY: It was decided at the April meeting that there was enough interest in an Auction to hold one, and we probably have enough stuff to move about, so an Auction it is for May. See article inside.

JUNE: Another technical night. (These seem to be quite popular). Roger VK2AIV didn't get a chance in April to talk about how to make helical whips for HF, and so he will lead off. There could also be a (short!!) video, if the one we have is worth showing. If anyone else has something they would like to talk about for half an hour, let us know and we will slot you in.

JULY: Annual General Meeting of the IARS Inc. Many people are afraid of coming to AGM's because they think they will be sucked in for a job. In the IARS this is far from the truth - the big jobs have to be nominated beforehand and there is never pressure on anyone to take a job. Come along, watch the action and make your voice heard.

DOTC QUESTION

Last month we asked you about capacitive reactance: What is the reactance of a 180pF capacitor at 9 MHz?

The answer was (D) 100 ohms. The formula for capacitive reactance is $1/(2\pi fC)$ (it's difficult to type formulas on a word processor), where f is frequency and C is the capacitance. Substitute in and you get about 98.2 ohms. Have fun remembering that one for the exams.

This month we ask you about frequency to period conversions: The period of 0.02 seconds corresponds to a frequency of:

- (A) 20 Hz
- (B) 50 Hz
- (C) 144 MHz
- (D) 432 Mhz

QSL CARDS LIST

Again we have another pile of QSL cards sent in. Graham VK2GID presently has cards for VK2's: ALK, AMW, ALV, AQF, BHO, BIT, CRM, EU, FDE, FEJ, IU, JAC, JHW, JJ, JJJ, KHE, PEF, TPH, VAV, ZLJ, ZNS, ZRK.

IARS CLUB BADGES

Many of you will have seen those trick looking yellow badges worn by some club members, with the IARS logo, your callsign and your first name. Ron VK2JRH has arranged to get some made up for anyone who would like one. The cost of each badge is \$5.00, for which you get a personalised badge with clip on the back and a very professional looking product.

Ron would like to put all of them in to get done together (for reasons of economy), so if you would like one of these badges to wear about the radio world, see Ron VK2JRH at the May club meeting.

MAY MEETING

As previously publicised, the May meeting of the IARS will be an Auction. People will be available at the SES building to register anything that you have to sell from about 5:30, and please have everything put in by about 7pm, so that we can get underway by 7:30.

The auctionerr will be Graham VK2GID as has been the case the last few auctions, unless anyone else would like to have a go (it's very easy - if I can do it then anyone could!!). Remember that we don't take cheques, but if you want to buy something and haven't got the money there, you can arrange to buy it the next day or whatever.

SCIENCE CENTRE

Don't forget that the IARS is running a display at the University's Science Centre every weekend through May. Even if you aren't rostered to help, have you thought of coming along for a look? The Centre is open Saturdays and Sundays between 1 and 5pm, and has many displays on various interesting topics. Most of the work is a "hands-on" type of affair, so it is great as a learning atmosphere.

Bring your kids, or even come alone. Remember that there is a (small) entry charge, which of course is waived if you call Dale VK2DSH and offer to come along and help out for an afternoon (then you get to look at it all for free!!) The Centre is at Campus East, Fairy Meadow (just north of Brandon Park, access via the north end of Montague Street.

CHANGES TO RULES OF ASSOCIATION

Readers may have noted that at its last two meetings, the Committee has been looking at the Society's Rules of Association, in an effort to bring them into line with the way that the IARS is presently run. The following is a brief summary of proposed changes; see your friendly Committee member for a detailed list (to save filling the magazine with many pages):

- Rule 1 - Updating names of Govt departments.
- Rule 4 - Membership lost if memb fees are unpaid for 2 months.
- Rule 7 - Location of Register of Members is specified.
- Rule 11 - An appeal against disciplinary action now only possible at a special general meeting.
- Rule 13,14 - Including repeater and editor chairpersons on Committee
- Rule 14 - A member can only hold one Committee position.
- Rule 15 - Clarifying that the secretary is the public officer of the Society.
- Rule 16 - All payments made by cheque, treasurer to prepare an annual statement as per the Act.
- Rule 18 - Clarifying meaning of this Rule.
- Rule 19 - Clarifying the president takes the chair at Committee meetings.
- Rule 21 - Committee actions to be minuted.
- Rule 23 - Clarify relevant section of the Act.
- Rule 24 - Clarify that annual financial statement must be sent to the Commission as per Act.
- Rule 29 - Reworded to make it easier to understand.
- Rule 31 - Allows a member to have any number of proxy votes.
- Rule 39 - Clarify that outside people may inspect documents for a fee.

As stated above, members of the Committee have the actual wordings of the changes available for your perusal.

NOTICE OF SPECIAL GENERAL MEETING

Members are advised that a Special General Meeting will be held at 7:30pm at the SES Headquarters building, Montague St. North Wollongong (immediately before the general meeting) to consider the following motion on notice:

"That the Rules of the Association of the Illawarra Amateur Radio Society be updated as discussed at the March and April 1992 Committee meetings" (Moved Brian VK2KLH, seconded Graham VK2GID).

A summary of the proposed changes is at left, a full list can be obtained from your committee members.

For those members not able to attend the meeting, feel very welcome to fill out the enclosed proxy form. This form allows you to voice your vote without actually attending the meeting (which is worthwhile).

FOR SALE

Once again, Phil VK2TPH has something to sell. (Rumors that Phil is a black market racketeer are completely unfounded.)

This month, Phil has a Yaesu FT-787GX (160m to 70cm, all bands in between) for sale. The rig has only seen casual work on the 6 metre band. This is a reluctant sale, and the price is \$3000, no offers, no tyre-kickers. Ring Phil on 613686, or catch him on the bands.

REPEATER REPORT
(As at 25/4/92)

VK2RAW/VHF:146.850: On the 25th March we were still trying to fix the transmitter exciter that had died on th 18th March. We had tried many things, but finally concluded that one or all of the 5 dual-gate FETs in the exciter was faulty, even though out of circuit testing seemed to indicate that they were OK. We tried to get replacements, but most retailers had not even heard of them (MPF 121).

Eventually we decided to try a suggested substitute (MFE 131), which had the same specs and pin configuration, but a different package. Replaced all 5 FET's and retuned. We now had RF power, but only about 2.5 watts for 13.8V supply. (The exciter used to put out around 6 or 7 watts for the same voltage.) No matter how much tuning and retuning we did, we were unable to get more than 2.5W. After discussions on air, Steve VK2XNH found that he had some MPF121's (original FETs. He sent them up by post and they were duly installed on the 31st March. An extra 1 to 1.5 watts, but still not brilliant.

As the repeater had now been off air almost two weeks, we decided to put it back on air with the slightly reduced power (output from the PA used to be 25 to 30W, now 15 to 20W). This was only to be temporary, to give us time to figure out the cause for the reduced power output. When the repeater was reinstalled on the 4th April, everything worked OK, but the mute had to be set higher than normal to close reliably. We then left the site for Knight's Hill.

I was with Michael VK2XCE and Rod VK2TRB from Nowra and we assisted in the planned installation of a bay of 4 phased dipoles on the TV tower for "Living Sound FM" 106.3 MHz. This continued well into the night (working with torches at 250 feet) and we didn't leave until around 8pm - a lot later than the planned return to

our spouses at 4pm; trouble with a capital "T"). While on site at Knight's Hill, we did some work on 9225, see the report further down).

Two days later, 8850's squelch started opening intermittently. Peter VK2KHE and Graeme VK2XLA went to Mt Murray on Monday 6th April to check the system for possible desense and to turn the mute point up higher. They were unable to pinpoint exactly what was causing the problem. They also tried moving equipment positions in the cubicle, but nothing decisive. We felt that the reinstalled exciter had something to do with it though. Left site with the squelch behaving itself, but about a day later it started playing up again, mostly at night. Ken VK2TKE ducked up a couple of days later and turned the squelch higher again to counteract.

The repeater was then left until Easter Monday, when Ken went up to the site again, this time to remove the whole repeater and diplexing cavities. He then spent 3 days pulling the main system apart and building it back inside a cabinet. (The repeater system consists of the following separately cased items: controller, ident, receiver, exciter, PA, RTTY control decoder and WIA broadcast receiver.) The receiver and transmitter parts were separately housed with feedthrough capacitors between them. The result is an excellent repeater now housed in a most attractive cabinet, that should work better and takes up a lot less space in the cubicle. Well done and thank you Ken.

On Thursday 23rd April, the repeater was put through numerous tests on my rather limited test bench. Also I built in a small audio amplifier and installed in into the repeater to monitor the received signals. I found that there was still some desense to the repeater from the transmitter. Spent considerable time trying to rectify it, but as my test equipment is rather crude and it

was 3:30am I had to admit defeat. Saw Graeme VK2CAG later that morning and he was happy to give it a go, even with his very limited spare time. At the time of writing, we are awaiting Graeme's findings. Hopefully, by the time you read this, 6850 will be back, better than ever.

VK2RIL/VHF:147.275: This repeater is still working well, but I have started to notice what appears to be false triggering. No-one has mentioned it as yet and maybe it will turn out to be nothing. The repeater sounded at first like someone was continually "kerchunking" it, but then I noticed that there was no noise burst from the repeater's squelch, just a clean carrier for a few seconds. I'm unsure what would cause this, but I suspect a pager.

I have a very pessimistic view in regard to how long our VHF repeater is going to survive at Sublime Pt, surrounded by the ever increasing amount of RF equipment (including the pager) being installed by Motorola.

VK2ROW/UHF:438.225: All working fine until around the end of March, when it appeared that the link receiver from the Goulburn repeater would sometimes fail. While helping to install the "Living Sound FM" antenna on the 4th April, we attempted to fix it but as is the case with intermittent faults, it decided not to fail the whole 6-1/2 hours that we were there. Of course, the next day it started again, not all the time, only occasionally.

On the 7th April one of the techs from work had to do a trip to Knight's Hill so I hitched a lift. This time (with Murphy's attention elsewhere), the fault occurred while on site. Found a suspect pin connection on the DB9 plug on the back of the link transceiver. Voltage, temperature or humidity fluctuations may have been all that was needed to make or break the connection.

Since then, everything has been working fine. The plans for the linking of the present two repeaters (8225 and 8325 Goulburn) with 8525 Mt Ginini is definitely underway. The linking will be done from Ginini to Mt Gray on 23cm with the equipment already available. There is talk at the Canberra end of possibly using DTMF tones to enable and disable the link.

We spent the Easter weekend on a property near Marulan and was able to use the link system the other way around. It was quite a "buzz" to be able to talk back home on the handheld, while out bushwalking in the middle of "nowhere". We were invited on Easter Sunday to a BBQ at Goulburn put on by Dave VK2BDT. A very enjoyable day was had, a nicer bunch of people you couldn't hope to meet. Also inspected both Goulburn repeater sites and Dave's antenna farm and shack. On the 17th May, the Goulburn ARS is having another club BBQ. If you're interested, contact Dave VK2BDT, Ian VK2AIJ or myself for details.

VK2ROW/PKT:144.775: Attempted to reinstall the system on the 4th April with Michael VK2XCE's assistance. "Sort of" working, but elected not to leave. Michael very generously offered to take the DR200 controller and both the UHF and VHF radios back home and get the system working 100%. Probably by the time you read this it should be back on the air.

VK2RIL/UHF: 438.725: Family commitments and the work on 6850 have unfortunately prevented me from doing as much work on the rebuild as I would have liked. Still have a small amount of desense to lick, half a control board to finish, a power supply to complete and a better squelch to build. The whole repeater system, including the cavities, is being built into a small rack-mount cabinet.

Till next time... Rob VK2MT

WAY BACK THEN... Episode 7.

JAN. 1970 to DEC. 1970
A Busy Year for the Club.

An early start to the new AOCF classes was prevented by lack of numbers. A short course for those aiming to take the Exam. in August commenced on 12th June, with Hank VK2BHL in charge. Morse Code practice was held by Basil, VK2AW, for an hour each month, prior to our Meetings. This was supplemented by twice a week Code sessions on 6 metres by VK2AFF.

The election of Officers in March resulted in - Pres. Don Reynolds, VK2ZRK. Vice Pres. Eric Fisher, VK2DY. Sec. Hank Laaw, VK2BHL. Treas. Alan Ward, VK2VH. Area Off. Lyle Patison, VK2ALU. WICEN Off. Tom Barnes, VK2ABI. Librarian. Graeme Dowse, VK2AGV. Committee. VK2's AGV, ALU, BRE & Brian Tucker.

The Club's Balance Sheet showed a Credit of \$32 at the time of the AGM.

At least one Club member was hearing the Beacon transmissions of the Amateur Satellite "Oscar Australis" (AO5) on 144.050 MHz about this time. 6 metre DX was also reported as being worked.

In March a Motion was put forward "that the Club investigate the possibility of obtaining permanent Club premises of its own" A poll was taken of members opinions and detailed discussions took place at subsequent Meetings. Because of perceived difficulties it was decided that the Gosford Club and maybe others, be approached in order to benefit from their experiences. There is no record of their replies in my information and the matter was allowed to lapse, probably because of the cost involved for a Club of our size; also we were starting to think about other projects which may be more deserving of our

Limited Club funds.

Club Fox Hunts resumed in June and continued on a monthly basis, to the great enjoyment of all who participated. 6 metres was still used. In September "an attractive trophy" was presented to the Club by Basil Dale, VK2AW, to be held by the winner of each monthly Foxhunt.

A Club Field Day was held at Mt. Keira on 14.6.70. We participated in the WIA VHF Field Day, operating on both 6 and 2 metres. 6 metre FM operation was getting under way, using converted "Carphones", and "Pye" mobile transceivers about this time.

In August we obtained Name badges for individual Club members. The Club also participated most successfully in the Wollongong Models and Hobbies Exhibition during this month. VK2AMW was activated from the Police Boys Club during the Exhibition for the weekend of the 1970 RD Contest.

In November a Club Field Weekend was held under canvas at Bass Point, using the callsign AX2AMW (a "200th Anniversary" callsign). This was quite a complex operation and many of our members participated in one way or another. A petrol driven generator was the source of 240VAC power. Antennas were erected for simultaneous operation on 40, 20, 10, 6 and 2 metres as well as 432MHz; using AM, FM, CW and SSB. Some 250 QSO's resulted - A real Club effort, considering that attendance at Monthly meetings was between 15 and 30!!!!

By the way, it was noted that FM was taking over from AM on 6 and 2 metres, based on stations worked in Sydney etc.

There was a detailed discussion of operation on the Club 52.982MHz AM Net at the November meeting.

Lectures and films etc. at
Club meetings during the year -

Feb. - Film on discovery and
development of commercial
television.

April - Film "Pulse of Life" shown
to members & others, followed by an
excellent lecture and demonstration
(using a dummy mannikin), on mouth
- to - mouth resuscitation and
cardiac massage by Club member, Dr.
Ian Bowmaker, VK2ZJA.

May - Lecture on Amateur Television
Bill O'Donnell, VK2ZBU, of Sydney.

Aug. - Lecture on WICEN by Peter
Campbell of Sydney and film on the
role of Amateur Radio in a major
disaster in Canada.

Sept. - Film on Commercial
Satellite TV and talk by VK2AFF on
the conversion of commercial FM
mobile sets for Amateur use.

Nov. - Talk by Chris, VK2ZDD, on
VHF and WIA activity in Sydney.

VK2AMW Moonbounce Project - 1970.

This was the first real year
of the Project. It was taken up
with detailed planning, obtaining
information on EME equipment
requirements from overseas sources,
mainly, discussions re finance and
assistance by staff of the
Wollongong University College with
rehabilitation of the dish
structure and construction of
certain items of equipment which
required workshop facilities etc.

Antenna feed systems were
made up and tried out, equipment
cubicles installed, the 30 ft. dia.
dish and its structure sandblasted
and repainted, dish drive equipment
removed rehabilitated and made to
work to our requirements, and a

start made on obtaining and
installing the many types of power,
control, protection, interlocking
and rf cables and their associated
devices. Several underground ducts
had to be installed to carry these
cables between Operating building
and Dish structure.

By the end of the year the
dish feed tripod (made up of three
20 foot long pieces of 3 inch dia.
steel tubing) had been installed
and a dipole and reflector feed
mounted, a low noise (by 1970
standards!) transistor receive
preamp. for 432MHz (2.5dB NF) had
been made and installed in a
weatherproof box at the feed and a
temporary receiving system had been
made up and installed in a cubicle.
This consisted of a high quality
432 to 28MHz converter modified for
us and then donated to the Project
by STC Aust. of Sydney feeding
VK2ALU's Galaxy transceiver, used
as a receive IF channel. This fed a
narrowband audio filter and finally
a chart recorder amplifier and into
a multi speed chart recorder. All
this to allow us to carry out
measurements of antenna gain and
beamwidth, using the Sun as a noise
source and also to check the
sensitivity of the complete receive
system against the minimum
requirements for EME communication.

A "half power" antenna
beamwidth of 4.5 degrees, giving an
antenna gain of some 27 to 28dBd
was eventually obtained and some
10dB of Sun noise was obtained with
this setup, just sufficient for
reception of some of the overseas
EME stations of that period.

Ralph, VK2ZRG, in Sydney, was
on the way towards completion
of the 432MHz high power
transmitter for which it had been
necessary to calculate and forward
a detailed submission covering
minimum transmitter power (and DC
input to PA tubes) to the PMG Dept.
via the WIA for them to grant us a
High Power Permit for 1KW DC Input.
The transmitter used a 4CX250

doubler from 216 to 432MHz. driving a pair of 4CX250's as a push pull final (later changed to a K2RIW design of paralleled 4CX250's in a stripline configuration), but by year's end only the driver had been completed, using an 300V power supply made up by members of our group. We had also made up several items of specialised test equipment required to test and optimise receiver noise figure, bandwidth etc. and also to measure dish "spillover", feed illumination of the dish etc.

By the end of the year over \$800 of University funding had been employed, the Amateur Astronomer Group had dropped out and we had, according to entries in my Project diary, put in over 400 man hours of work on the project (actually much more!). Fourteen Club members are shown individually as having contributed assistance plus eight Amateurs from the Sydney area. Several of the University staff and also Officers of the WIA NSW Divn. and Federal HQ of WIA and of the PMG Dept. had rendered valuable assistance. Last but not least, the small band of international EMEer's had offered any assistance which they could give and which later provided a wonderful source of "exotic" components and know-how.

The Club's financial contribution had been intentionally limited to reimbursement of cost of trunk line phone calls.

The above information has been made somewhat detailed in order to convey some idea of what was required of us to "kick-off" an EME project. There is no doubt that it fired the enthusiasm of many people, because it was, at that time, at the "leading edge" of Amateur communication achievement.

As the ARRL UHF/Microwave Experimenters Manual puts it -Of all the propagation mechanisms in the UHF and microwave spectrum, the Earth-Moon-Earth path has unique

characteristics that make it an extremely rewarding challenge. It later goes on to say - Regular 432MHz activity began in 1971 with a contact between VE7BBG and WA6HXW. Within a month they were joined by K2UYH, W6FZJ (now W1JR), W9WCD, VK2AMW and G3LTF. Activity has steadily grown since then.

So we were soon to join the very small band of successful EME stations - but not before overcoming a few trials and tribulations!!!!

Lyle VK2ALU.

STOP PRESS

Do you want too have some fun?.....

Well come to the Science Centre and help operate VK2AMW. Our first weekend of operation was excellent! VK2XGJ, VK2FPN, VK2XCC & VK2DSH had contacts all over the world on SSB, packet and RTTY. We put up a rather large multiband loop, some 70 metres across, our first contact was with a station in Finland who gave a 5 & 9 report, many other contacts followed.

The reaction of the public was very good, many people were surprised that we could talk to people on the other side of the world with such ease, one lady reckoned she was going out to buy a radio straight away. Many younger people enquired about what courses they could undertake to obtain a licence. This venue gives us an excellent opportunity to show the benefits of amateur to the public - and to have a lot of fun ourselves!

CONT'D ON P 10

PACKET BELOW THE ESCARPMENT

It has been a while since I've put pen to paper for the Propagator so here is my first effort for some time. Much has happened on the Packet scene in the Illawarra over the last twelve months so I'll give a brief resume here.

First off is the new NetRom Digi in the Bowral/Robertson area, VK2XDM-1. This digi is on 147.575 MHz at 1200 baud with a Gateway onto 144.800 Mhz at 4800 baud. To use it, connect to VK2XDM-1, then by entering N? you will get back a list of stations that you can connect to by entering C VK**** and the digi will then connect to that station for you.

If you've been watching the node lists a few weeks ago, you may have seen some exotic callsigns, quite unexpected on VHF Packet. They were coming from the Melbourne Uni system and at one time I managed to get over to the University of Illinois and who should I find over there but VK2XY and VK2TZ. Long way to go for a "chat".

The proximity of VK2RAW-1 to VK2RAW digi was causing a mutual interference problem and after VK2TKE shut the VK2RAW digi down, I have retrieved the TNC and will be modifying it to operate on the UHF frequency of 439.075 at 9600 baud. This will be under test for some time until I get all of the "features" (bugs) ironed out, then we should have the beginnings of a high speed backbone, as the Central Coast chappies may already be online at 9600 baud.

This will take some/most of the BBS traffic off 147.575 MHz and reduce some of the retries etc. At the moment the 9600 baud link will only be for BBS traffic only and the general users' BBS will not operate at 9600 baud unless Rob VK2MT will allow me install a second TNC and radio at Mt Murray on a user frequency. Highly unlikely due to our battery capacity at Mt Murray.

One problem has developed as part of the congestion on 147.575. The path between VK2XGJ BBS and VK2XDM-1 is close to hardwired - 30 or 40 dB over S9. Consequently every time the BBS fires up, VK2XDM-1 is affected. For this reason I have asked all users who can access the VK2XGJ BBS direct to use the 144.875 or 439.100 ports. Most of the users have complied with this request, but as you know, we have some local "Individualists" that still use the 147.575 port. Come on, chaps, it only takes a second or so to change channels! Not like the old days when you were crystal locked.

In the same vein, when the BBS transmits on 144.875, VK2RSD ROSE node in Cambewarra hears all, and vice versa. To solve this problem, the 144.875 port has been closed and a new frequency of 144.855 MHz has been opened as a BBS local net channel, with the VK2XGJ BBS and no digis. This should give more satisfactory operation for the BBS, VK2RSD and local users.

Several users who want to send messages overseas are having problems with the hierarchical addressing. If you enter a message onto the BBS and are not sure of what its address should be, leave me a message on the system with the message number and the callsign to which it has been addressed, and I'll edit the hierarchical address to get it as close as possible for the BBS involved for you. Similarly if you contact a station overseas and they ask for your Packet address, it will be:

VK2*** @ VK2XGJ.NSW.AUS.OC
and the message from your contact will be delivered to your BBS.

I have been thinking of putting up a file-server for the transfer of program files as the MSYS BBS does not support this. Any interest???

Over the last three or four months, I've been accessing the Pacsats and FO-20 Packet satellites with reasonable success. It is totally different to the terrestrial systems. Full duplex, uplink on 145.920 FM Manchester protocol and downlink on 437.0328 USB, with Doppler shift partially done by the TNC's gives access to some new and interesting Packeteers. This is done at the old 1200 Baud. I hope to soon get up on 9600 baud on WO-18 and uo-14 to get some picture files and access the software on board.

Enough of my doings! I see now that we have some new Packeteers in the Illawarra, Mike VK2BLR, Rob VK2SRB, Gerry VK2APG and Peter VK2BIT. Look out Rob VK2MT, you're next! Then the one I really want to see on Packet is VK2XCC Ray.

Well, till next time, 73 from John VK2XGJ.

FROM P 8

Another advantage of operating at the science centre is that it is a very quite location, there appears to be no electrical noise and no close neighbours, so no problems with TVI!

So, if you want to have some serious fun, and contribute to this club activity, come along. We have a TS-520 for HF and a beaut aerial, or bring your favourite gear and show it off! If you can come along contact Dale Hughes on 28 5056 AH or 21 3506 BH.

Be there or be square!

THE REMAINING JOBS

Over the last couple of months we have had a brief description of all of the elected and nominated positions of the IARS. This month we finish off the list:

BROADCAST OFFICER AND TEAM: This used to be run by one person, but has been much more practical when run by a team of people. For the WIA broadcast on Sunday days and nights, someone has to turn VK2RAW's broadcast receiver on and off by remote control (RTTY), and also take the callbacks at the end.

EDITORS/PRINTERS: These people are responsible for producing the newsletter that you are holding. This involves collecting reports from the writers, typing everything up in suitable format, sticking it together, photocopying, folding and mailing out to everyone.

SOCIAL DIRECTOR: This person organises various social events through the year for the IARS.

CANTEEN: Responsible for organising the canteen on meeting nights.

STORE: The IARS store (the room on the left as you walk into the SES building) has lots of bits and pieces, and this person looks after all of the gear and sales of gear.

DOTC LIASON: This position is there for someone to discuss things with the Dept of Transport & Comms when such things arise.

LIFE MEMBERS: These are not an elected position! However they are on the back page, so this shows that I haven't forgotten them.

Of course, if you are interested in what is involved in a particular job, ask the person currently in it. Most of the back page people get along to many of the society's meetings.

FORM OF APPOINTMENT OF PROXY

We print here a proxy form, which can be used to vote on the proposed changes to the Rules of the Association in the case where a member will not be present at the Special General Meeting in June. To be valid, the proxy form must be completed fully, and sent to the Secretary at least 24 hours prior to that meeting. You can either post it to the IARS at the address on the back cover, or bring it to the May meeting if you prefer. Make your vote count!!!

THE ILLAWARRA AMATEUR RADIO SOCIETY INCORPORATED
(incorporated under the Associations Incorporation Act, 1984)

I, _____ of

(address)

being a member of the Illawarra Amateur Radio Society Incorporated hereby appoint

_____ of

(address)

being a member of that incorporated association as my proxy to vote for me on my behalf at the general meeting of the Association (Annual general meeting or special general meeting as the case may be) to be held on the _____ day of _____, 19__ and at any adjournment of that meeting.

(Delete the following paragraph if desired:)

My proxy is authorised to vote in favour of / against (delete as appropriate) the resolution (insert details).

Signature of member
appointing proxy

Date: _____

POST BOX - All mail can be sent to "THE ILLAWARRA AMATEUR RADIO SOCIETY" at PO Box 1838, Wollongong, 2500.

REPEATERS - VK2RUW - 29.620 Voice Mt Murray/Knights Hill
- VK2RUW - 144.775 Packet (ROSE) Knights Hill
- VK2RAW - 146.850 Voice Mt Murray
- VK2RIL - 147.275 Voice/RTTY Sublime Pt
- VK2RAW - 147.575 Packet (NetRom) Mt Murray
- VK2RUW - 438.225 Voice Knights Hill
(Off air) - VK2RIL - 438.725 Voice/RTTY Sublime Pt

BROADCASTS - The Wireless Institute of Australia, N.S.W Division broadcast is relayed to 29.620 MHz and 146.850 MHz at 10.45am and 7.15pm each Sunday. Callbacks after the broadcast. RTTY broadcast in the week before the Club meeting, Sunday evening, 6:45pm on 147.275 MHz, relayed onto 3.618 MHz +/- QRM and 29.620 MHz, with callbacks immediately after.

NEWS LETTER - The "PROPAGATOR" is published each month to reach all financial members in the week preceding the Club meeting. Articles and letters are always welcome. Commercial advertising \$40 per quarter page per year, member's classifieds free for one issue. See Graham VK2GID for details.

MEMBERSHIP - \$15.00 P.A, concessions \$12.00 P.A, expiring immediately after the Annual General Meeting in July.

STORE - The Club store is open at each meeting, and sells all sorts of hard to get knick-knacks that you might need.

LAWRENCE HARGRAVE AWARD - VK stations require 10 contacts with IARS members. Overseas stations require 5 contacts. One contact with the Club station VK2AMW is suitable. Details of contacts are to be sent to the Club secretary.

***** COMMITTEE *****

PRESIDENT	-VK2KLH - Brian Clarke	
VICE PRESIDENT	-VK2GID - Graham Denney (042) 294170	
SECRETARY	-VK2KCV - Pat Kennedy (042) 673199	
ASSIST SEC	-VK2GPJ - Pat Jordan	
TREASURER	-VK2TKE - Ken Goodhew	
ASSIST TREAS	-VK2SRB - Robert Bonella	
COMMITTEE	-VK2DSH - Dale Hughes	-VK2GPJ - Pat Jordan
	-VK2XCC - Ray Ball	
ASSOCIATES	-VK2JRG - Ron Hanks	-VK2KWG - Ken Grimm
	-VK2MT - Rob McKnight	-VK2SRB - Robert Bonella
	-VK2XLA - Graeme East	
	-VK2XGJ - John Simons (042) 614628	
REPEATER PRES	-VK2MT - Rob McKnight	
REPEATER COMM	-VK2TKE - Ken Goodhew and others	
QSL CARDS	-VK2JBS - Bill Stone	-VK2GID - Graham Denney
PUBLICITY	-VK2KWG - Ken Grimm	
BROADCAST	-VK2TKE - Ken Goodhew and his merry men	
EDITORS/PRINTERS	-VK2DSH, VK2GID, VK2XCC	
SOCIAL DIRECTOR	-VK2XCC - Ray Ball	
CANTEEN	-VK2JRG - Ron Hanks	
STORE & TOWER	-VK2KVH - Vic Hee	
DOTC LIASON	-VK2OB - Keith Curle	
LIFE MEMBERS	-VK2ALU - Lyle Patison	-VK2CAG - Graeme Dowse
	-VK2OB - Keith Curle	