

THE PROPAGATOR

MONTHLY NEWSLETTER OF THE ILLAWARRA AMATEUR RADIO SOCIETY

PO BOX 1838 WOLLONGONG NSW 2500

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MEETINGS ARE HELD ON THE SECOND TUESDAY OF EVERY MONTH EXCEPT JANUARY, AT 7.30. PM IN THE S.E.S. HQ MONTAGUE ST. NORTH WOLLONGONG. VISITORS ARE MOST WELCOME TO ATTEND MEETINGS.

LAST MONTH'S MEETING: Approximately fifty members were in attendance at last months meeting, held Tuesday 13th November. This number has been fairly constant during the year so let's see if we can double it for our last meeting of the year on December 11th. As a matter of comparison, our membership figures seem to have stabilised at one hundred and fifteen.

An interesting item of news was brought forward by Lyle VK2ALU. It appears Wollongong has two (Potential) sister cities, one in Yugoslavia, the other in New Guinea. It is understood that since last meeting, more details have become available and no doubt will be advised this week. With our fair city's 150th celebrations in full swing a public DX contact, certainly with a YU station would be great for our contribution to the activities.

VALE - John Telfer VK2BTQ - It is with regret we note the passing of John VK2BTQ. John was known to many of the Society's members particularly while he was living on the South Coast. Our sympathies are extended to John's wife, Gwen, who is now living in Manly Vale.

The activities following the usual succinct formal general meeting covered a raffle won jointly by Charlie VK2BOZ and Mike VK2DFK and a trade display by Dick Smith Electronics. Our thanks to Tony and the boys from DSE.

Our multi-callsign social director Ray VK2PHD/XCC has organised an annual picnic BBQ at Cordeaux Dam for this Sunday, 9th at 10.00 a.m. Let's hope the Ed. and staff keeps this from being a retrospective announcement.

THIS MONTHS MEETING: Dave Hendo, VK2YKQ will be giving a talk on a subject in which few can excel - that is, computers and amateur radio. Dave has done a lot of work in this field as well as offering much help to many members. Our thanks in anticipation Dave for what we expect to become a major part of amateur radio.

The Colour T.V. guessing competition will be drawn this meeting. Would all members please remember to bring their tickets, or mail them to reach our P.O. Box in time for Tuesdays meeting.

EDITORIAL COMMENT

Well here we are at the end of another year and all thoughts turn to Christmas and new year revelry. I trust that you all give and receive what you wish and that you and your family all have a 'Joyous and Prosperous' festive season.

I was able to attend the last Meeting and was very pleased to see the good roll up but, at the same time was a little disappointed to see a lack of enthusiasm and support for club activities. We are endeavouring to promote the club in the Community and also trying to get new and hopefully younger members interested in the club. It seems that nobody really wants to get involved in organised activities such as the recent Warrilla High School Display day. No One came forward to help man a display for the club and as a result we were not represented on the day. A day like this is an ideal place to obtain new members, and new blood is what we need to survive as a club. If not we will end up an old boys society Hi.

On a different note, don't forget to sell your remaining Raffle tickets before the next meeting, as all tickets and monies must be in on that date. The raffle will be drawn on the meeting night so make the effort and support 'YOUR' club

An organized club activity has been set for Sunday 9th Dec at Cordeaux Dam, being the Annual Picnic Day. Come along and support Ray VK2XCC/PHD to make this a good show. Don't forget to bring the XYL and the kids, or for the unwed, the YL etc.

I wish to take the opportunity to thank Keith VK2OB for looking after the meetings and Committee meetings during my absence due to work commitments, which unfortunately do not allow me very much time for club and radio activity. I am however, kept up to date as to what is going on within the club at all times. To Mike VK2DFK, Ian VK2EXN and Morry VK2EMV for looking after the Broadcasts and Graeme VK2CAG, and his team for keeping the Repeaters on air. These are the type of members that keep a club going, but their time etc is limited so this is why I again ask you all to become involved in the running and activities of the club. Anyway, do have a good Christmas and New year and if you are driving please do so with safety and I hope to see you all in the New year. Don't forget that there is no meeting in January, due to the holiday season. The first meeting will be the second Tuesday in February 1985. Also think about the AGM in March, perhaps you might like to take on a position in the running of the club, or nominate someone for a position.

Cheers for now and see you at the meeting on Tuesday 11th December if not at the Picnic.

73 Dave VK2DFL.

The 2C39A tubes sent to us by VK5MC and VK5Z0 were returned with thanks, following the receipt of the tubes from ZS6JT.

As it was necessary to raise the driver tube anode voltage to 950V to obtain sufficient drive, when the replacement tube was installed, the eventual result was breakdown of the series electrolytics in its power supply. A 1500V paper capacitor cured this problem.

A telegram was received from HB9BM on 16/11, requesting that the start of the EME test with him on 17/11 be delayed by 30 minutes. The test commenced, as requested, at 0130Z and his signal was heard immediately at fair strength. 'M' reports were exchanged but the moon went below our western horizon before the contact could be completed. Unfortunately the chances of us having an EME contact with HB9BM in the near future are now nil, as news was heard via Oscar 10 that his dish antenna was totally destroyed by hurricane force winds which struck his QTH during the week following the 17/11. It is understood that some other European EME stations have also suffered damage to their antennas.

The aged 240VAC regulator, used for equipment supply voltage regulation, developed a short circuit when placed in service on 17/11 and has been taken to the Uni. workshop to see if it is repairable. If not, then we are looking for another 240VAC static regulator with a capacity of at least 500VA, in order to prevent dish tracking computer 'glitches' when the transmitter is switched on or the fast drive motor is started.

No EME tests have been scheduled in December but some stations will be on 1296MHz on December 8th and 9th between 1030Z and 1200Z. These skeds. were arranged between the stations concerned via Oscar 10. Unfortunately I cannot transmit on Mode L, which was being used, so could not get VK2AMW included

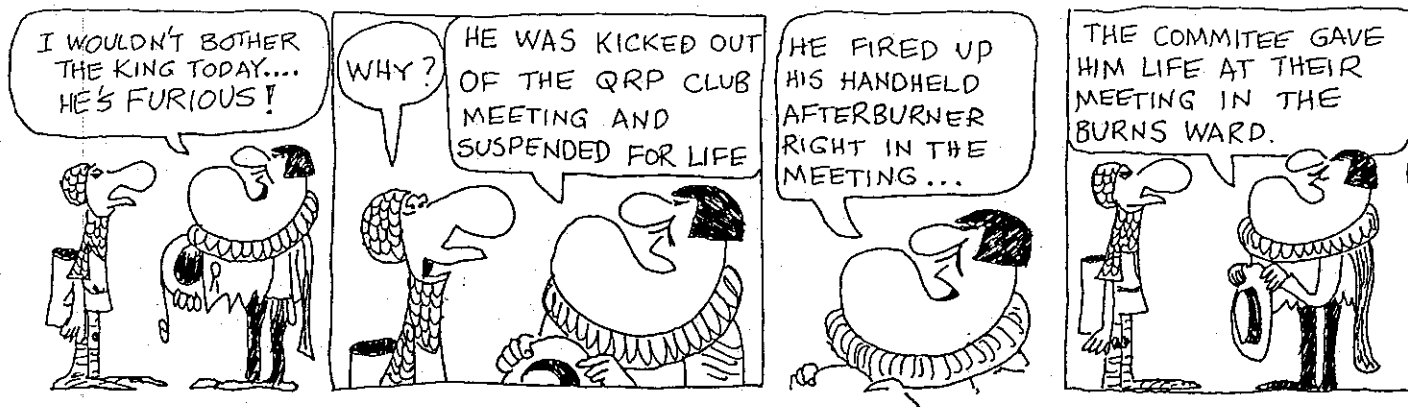
Satellite Jottings.

Oscar 10 continues to provide many interesting contacts on Mode B. Callsigns heard on SSB over the past week or so include LZ, I, DJ, G, SM, OE, OZ, UA, 9MØ, YB, JA, ZL, FK, YJ, KH6, VE, and W on Mode B while JA, VE, W and VK have been heard on Mode L and some long contacts on Mode B have been enjoyed.

This is my first experience with Mode L reception. Signals appear to suffer much less from 'spin modulation' type fading than on Mode B. Mode L uses 1269MHz for the Uplink and 436MHz for the Downlink. Use of a GASfett preamp at the receiving antenna is almost a 'must'. Some received signals are at least as strong as those on Mode B but others are down in the noise, probably because of insufficient ERP being used, as the Mode L beacon is of good strength. Mode L Transponder is operational for only approx. 46 minutes per orbit at present and during this period the Mode B Transponder is switched off.

The RTTY gear has been put to good use (the Siemens teleprinter providing hard copy) in order to get the RTTY bulletins which are transmitted on the Mode B beacon each $\frac{1}{2}$ hour and each $\frac{1}{4}$ hour on the Mode L beacon. A 50 baud rate is used.

It has also been found that a quite long and up to date news bulletin is being transmitted 'live' on Mode B, on approx. 145.960MHz during the period that it can be worked in USA. These are currently being heard daily.



REPEATER REPORT

THERE HAS BEEN LITTLE WIND AT MT. MURRAY FOR OVER A MONTH NOW, AND THE BATTERY VOLTAGE HAS BEEN FALLING BELOW 12 VOLTS AT TIMES. THIS FORCED US TO REDUCE THE TIME-OUT TO 20 SECONDS FOR A FEW DAYS WHILE WE MADE ARRANGEMENTS TO CHANGE THE BATTERIES .

AFTER A VISIT BY A GROUP OF OUR MEMBERS TO THE WARILLA POLICE COMMUNICATIONS CENTRE ON SATURDAY 17TH OF NOVEMBER, SOME OF THE GROUP VOLUNTEERED TO ASSIST BY CARRYING THE BATTERIES FROM THE VEHICLES UP THE HILL TO THE REPEATER AND RETURNING WITH THE OLD BATTERIES. THE WEATHER WAS FINE AND THE JOB COMPLETED IN LESS THAN 2 HOURS. THANKS TO ALL WHO GAVE THEIR TIME ON SATURDAY. IT IS PLEASING TO SEE PEOPLE OTHER THAN REPEATER COMMITTEE MEMBERS GETTING INVOLVED IN REPEATER MAINTENANCE WORK. IT ALSO GIVES THOSE WHO HAVE HAD MANY A QSO THROUGH THE REPEATER A CHANCE TO SEE THE ACTUAL EQUIPMENT AND SITE THAT MAKES IT ALL POSSIBLE. JUST SEEING THE SITE EXPLAINS WHY THE REPEATER COVERS SOME AREAS BETTER THAN OTHERS.

IT APPEARS AS IF 2 OR 3 BATTERY CHANGES WILL BE NECESSARY DURING THE SUMMER MONTHS. THE REPEATER COMMITTEE IS LOOKING AT WAYS TO IMPROVE THIS SITUATION.

MT. MURRAY GETS PLENTY OF WIND FROM THE WESTERLIES AND SOUTHERLIES DURING WINTER, BUT WINDS FROM N, N/E AND S/E WHICH ARE PREVALENT IN SUMMER SEEM TO HAVE INSUFFICIENT VELOCITY AT THE REPEATER SITE TO PRODUCE ANY USEFUL OUTPUT FROM THE GENERATOR.

ALSO ON SATURDAY SOME MINOR ADJUSTMENTS WERE MADE TO THE REPEATER. THE TIME-OUT IS NOW BACK TO THE NORMAL 4 MINUTES, THE AUDIO GAIN HAS BEEN LIFTED SLIGHTLY TO GIVE AN INPUT-TO-OUTPUT GAIN OF 1DB AT 1 KHZ AS SUGGESTED IN THE ARRL REPEATER HANDBOOK. ALSO THE MUTE SETTING IS NOW BACK TO NORMAL SINCE THE CONTINUOUS WEAK INTERFERING CARRIER EXPERIENCED A FEW MONTHS AGO (SUSPECTED TO BE COMING FROM ONE OF THE LOCAL TV TRANSMITTERS) HAS NOW VANISHED. ALL THIS SHOULD RESULT IN SLIGHTLY BETTER OVERALL REPEATER PERFORMANCE.

SOME INTRUDERS HAVE BEEN CAUGHT IN THE REPEATER CUBICLE --- HUNDREDS OF TINY ANTS WHICH HAVE PROBABLY SOUGHT REFUGE FROM THE DAMP OUTSIDE. THEY HAVE NOT YET EATEN ANY OF THE EQUIPMENT, BUT A CAN OF BAYGON WILL BE INCLUDED AMONG THE ITEMS TAKEN UP TO THE SITE NEXT VISIT.

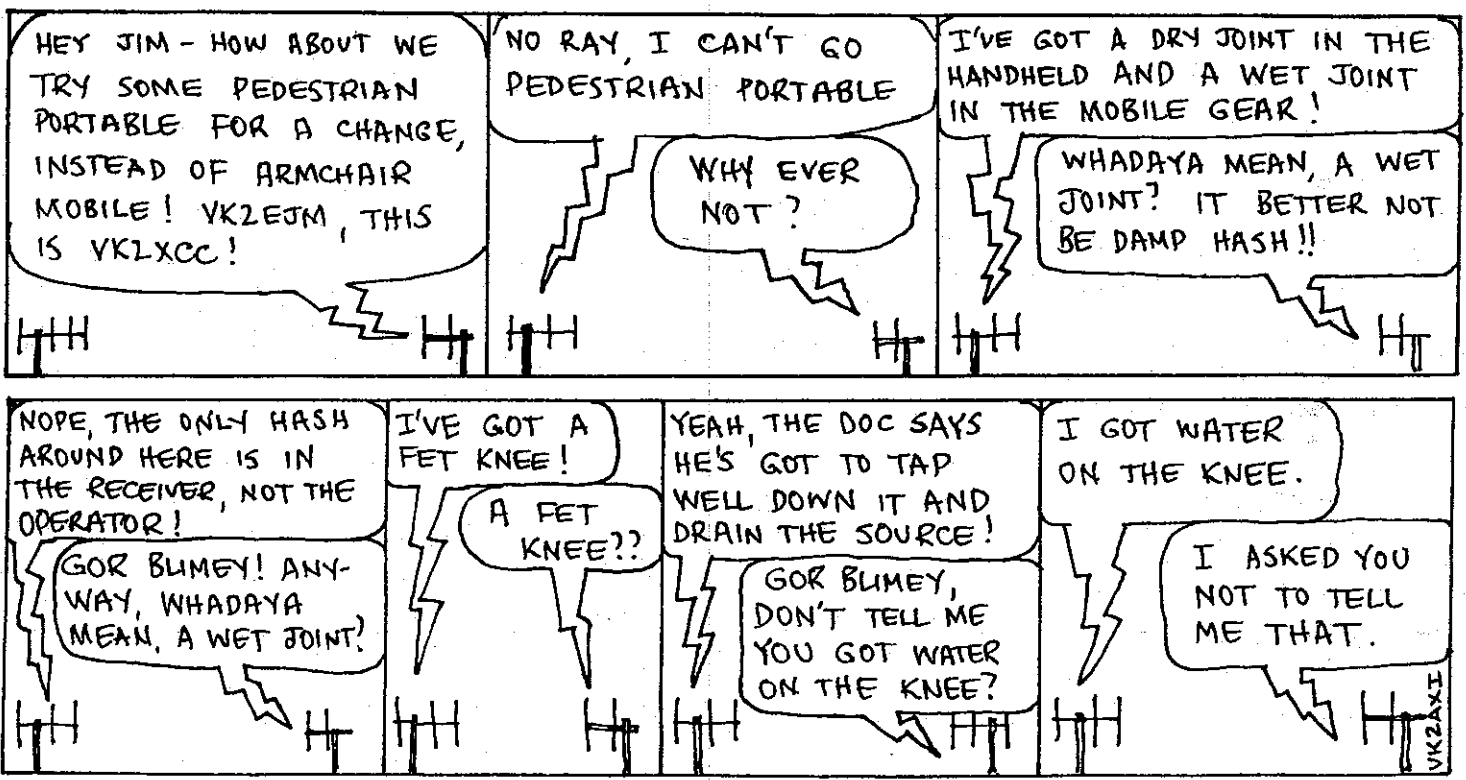
SOME NAMES WERE ACCIDENTALLY LEFT OFF THE LIST OF PEOPLE WHO HELPED WITH THE SUPPLY OF MATERIALS AND IN THE MAKING OF THE 2 METRE DUPLEXERS. THIS IS AN ADDITION TO THE LIST PRINTED IN THE REPEATER REPORT IN LAST MONTHS 'PROPAGATOR'.

BILL VK2DJ
 JIM VK2EJH
 GERHARD VK2XGA

CONT

ON THE DUPLEXER PROJECT WE STILL NEED A LARGE QUANTITY, ABOUT 20, 50 OHM BNC PLUGS TO SUIT RG58 CO-AX. RATHER THAN USE A SPECIAL TYPE OF BNC PLUG THAT WOULD BE NEEDED FOR DOUBLE SHIELDED CO-AX, WE WILL BE USING STANDARD RG58 CONNECTORS AND CO-AX, AND FITTING AN ADDITIONAL BRAIDED SHIELD OVER THE OUTSIDE OF THE CO-AX AND CLAMPING THIS BRAID TO THE OUTSIDE CASE OF THE CONNECTORS. THIS WILL SAVE CONSIDERABLE COST, AS DOUBLE SHIELDED CO-AX AND THE NUMBER OF MATCHING CONNECTORS REQUIRED WOULD COST AN ARM AND A LEG FOR SURE. EVEN DOING IT THIS WAY THE COST OF 24 REASONABLE QUALITY BNC PLUGS WOULD COST MORE THAN WE HAVE IN THE KITTY AT THE MOMENT. I KNOW THAT MOST OF US USE THE PL259 TYPE OF CONNECTORS, AND THAT MUCH OF THE GEAR THAT HAS BEEN BOUGHT FROM CAVIONS OVER THE YEARS CONTAINS BNC CONNECTORS... SURELY THERE MUST BE DOZENS OF THESE PLUGS JUST GATHERING DUST ON THE SHELVES IN RADIO SHACKS AROUND WOLLONGONG ... IT DOESN'T MATTER IF THEY ARE SECOND HAND, THEY CAN BE CLEANED UP.

GRAEME VK2CAG



FOR SALE FOR SALE

APPLE COMPATABLE COMPUTER..FULLY SET UP FOR R.T.T.Y 64K RAM, SUPER SERIAL CARD, 80 COLUMN CARD, Z80 CARD, DISK DRIVE CARD, 2 TEAC DIRECT DRIVES... ALSO TUII BUILT IN WITH ALL SWITCHES ETC.. READY TO RUN. FULLY PORTABLE RTTY SET UP... BAUDOT, CW SEND AND REC. ASCII.. COMPLETE WITH TEN (10) DISKS OF YOUR CHOICE... SEE MIKE VK2DFK QTHR. PHONE 042-832438....

AMTOR...NON-AMATEUR SOURCES OF TESTING SIGNALS.

As the AMTOR mode of communication grows in popularity, an increasing number of amateurs are building AMTOR interfaces and terminal units. Sooner or later the time for on-air receive testing arrives, but one simply cannot dial up the conventionally agreed frequencies and expect there to be AMTOR transmissions taking place. If there is no nearby amateur who can send test transmissions to assist the new station, then a problem exists.

However, there are reliable sources of AMTOR type transmissions, available on a 24 hour basis, and on several different frequency bands. These are transmissions emanating from the network of Coast Radio Stations that service the communication requirements of ships around the globe. The following points should be noted about these transmissions.

1) They are extremely stable, and use the same shift, 7-bit code and system timing as AMTOR. Transmissions are in upper sideband.

2) Signals are usually ARQ mode when working a ship. Frequent lengthy periods of idling signals can occur if the station is not busy. Alternatively, a CW call-tape, giving callsign and indication the station is standing by for TOR traffic may be heard.

3) Several stations have scheduled FEC mode broadcasts of traffic lists and weather. These are usually addressed to "CQ".

4) Following on from 3 above, the reception of FEC mode transmissions addressed to "CQ" by amateur stations FOR CIRCUIT ADJUSTMENT AND ALIGNMENT PURPOSES should not result in contravening the provisions of the Wireless Telegraphy Act, provided that the amateur station does not divulge the nature of the transmissions received. Should the amateur station inadvertently receive an ARQ mode transmission whilst engaged in circuit alignment and adjustment then the nature of that transmission MUST NOT be divulged. (Some AMTOR software has an "eavesdrop" mode which will copy ARQ transmissions of other stations, others do not have this feature.)

The following table of frequencies and times on which FEC marine TOR transmissions can be heard was extracted from the "Admiralty Lists Of Radio Signals Vol 1 Parts 1 & 2-Coast Radio Stations". These books are freely available to members of the general public through specialist bookshops.

TABLE OF FEC MODE WEATHER TRANSMISSIONS FROM COAST RADIO STATIONS:

Station	Callsign	Freq (Khz)	Times (UTC)
GUAM	NRV	8710.5	1500 1900
		13077	1500 1900
		22567	0001 0500
HAWAII	NMO	8718	0130 0430 0730 1330 2030
		13084.5	0130 0430 0730 1330 2030
		22574.5	0130 0430 0730 1330 2030
DURBAN	ZSD	4351	1715
		8714	1715
		13073	1715 0915
		17208	0915
		22592	0915

Cont.

Station	Call sign	Freq (Khz)	Times (UTC)
T LYS	FFL FFS FFT	4352 8708.5 13074.5	0700 1700 0900 1800 0900 1800
FEC t/c lists: 4352 6501 8708.5 13074.5 17201 22563 every even H+00UTC			
VANCOUVER	VAI	4354 13091.5	0200 0600 1800
SAN FRANCISCO	NMC	8714.5 17207	0000 1800 0000 1800
BOSTON	NMF	8490 13020 16968.8	0200 1700 0200 1700 0200 1700
MOBILE	WLO	4352 8707 13083.5 17199.5 22588	0530 1130 1730 2330 0530 1130 1730 2330 0530 1130 1730 2330 0530 1130 1730 2330 0530 1130 1730 2330

Obviously, other coast stations will also be heard in the vicinity of the above frequencies. Indeed, when the band conditions are good, a narrow bandwidth option on the receiver will be needed. Closer to home, the two main Australian F Coast Radio Stations, Perthradio (VIP) and Sydneyradio (VIS) also operate TOR services, but do not supply FEC mode weather broadcasts, or FEC mode traffic lists. For that reason their TOR frequencies are not given, but the shortwave listener will soon locate them by their CW call-tape in amongst the general GRM.

CLUB PICNIC.

THE ANNUAL PICNIC OF THE I.A.R.S. WILL BE HELD ON SUNDAY NEXT 9TH DECEMBER AT 10.30 AM AT CORDEAUX DAM PICNIC AREA. ALL WELCOME.. BRING ALONG YOUR FAMILY AND FRIENDS FOR A GOOD DAY OUT. FEATURES WILL BE THE INAUGUALL GUMBOOT THROWING TITLES. COME ALONG AND MAKE A DAY OF IT FOR THE CLUB AND THE FAMILY.

APOLOGY

DUE TO SOMEONE BEING VERY GOOD AND TIDYING UP HIS SHACK, THE FINAL PART OF HOW E.T. REACHED HOME HAS BEEN LOST... (HORRORS) HOWEVER I WILL ENDEAVOUR TO GET HOLD OF ANOTHER COPY AND WILL INCCLUDE IT IN A FUTURE ISSUE.. MY APOLOGIES TO ALL WHO WERE INTERESTED IN THIS ARTICLE.. (ED)...

THE ILLAWARRA AMATEUR RADIO SOCIETY - P.O. BOX 1838 WOLLONGONG 2500

Meetings: Second Tuesday of every month except January at 7.30 p.m. in the S.E.S. Headquarters, Montague Street, North Wollongong. Committee Meeting - 3rd Tuesday of each month.

Repeaters: VK2RAW - 6850 VHF Mount Murray. VK2RIL - 7275 VHF Sublime Point.

VK2RUW - 8225 UHF Hill 60 Port Kembla. VK2RIL - 8725 UHF Sublime Point.

Broadcasts: On Sunday night prior to Club Meeting - 7.00 p.m. - RTTY on 6850 and 7275 VHF Repeaters; 7.15 p.m., Voice on 6850 VHF, 7275 VHF and by relay on 3.562 Mhz. Call backs after the WIA relay at 7.30 p.m.

W. I. A. Relay: On 6850 VHF at 11.00 a.m. and 7.30 p.m. weekly on Sunday.

Club Nets: 3562 MHZ SSB on Sunday at 8.00 p.m. and slow morse net on 28.440 Mhz on Tuesday at 8.00 p.m.

Newsletter: "The Propogator", published monthly to reach financial members in week prior to meeting. All articles, ads etc. to the editor, Dave Myers VK2DFL at 30 Highlands Pde. Bulli 2516. Telephone 84.9404. Copy deadline 3rd Tuesday each month.

Membership: The Secretary, I.A.R.S. P.O. Box 1838, Wollongong 2500. Full membership is \$10.00 per annum; students and pensioner concessional members \$5.00 per annum.

Awards: The award of the I.A.R.S. is "The Lawrence Hargrave" award. VK stations require 10 contacts with I.A.R.S. members; overseas stations require 5 contacts with I.A.R.S. members or contact with the Club station VK2AMW is sufficient in itself for the award.

Band details - time, day, date, frequency, station worked + \$2.00 or 4 I.R.C.'s to Award Manager, I.A.R.S., P. O. Box 1838, Wollongong 2500. No QSL cards required.

Store: The Club store operates at each Club meeting.

Committee: President - Dave Myers VK2DFL, 30 Highlands Pde., Bulli.

Vice President - Keith Curle VK2OB, 24 Beach Drive, Woonona.

Secretary - Murray McConnell VK2MY, 62 Ramah Avenue, Mt. Pleasant.

Treasurers - Geoff Cuthbert VK2ZHU, 2 Nioka Avenue, Keiraville.

- Andrew McEwan VK2XGC, 7 Nioka Avenue, Keiraville.

General Committee: Mike Keech VK2DFK, Ian Callcott VK2EXN, Ray Ball VK2XCC, Morry Van De Vorstenbosch VK2EMV, Jim Mead VK2EJM, Gerhard Mueller VK2XGA, Jim Hayes VK2KJJ.

Repeater Chairman: Graeme Dowse VK2CAG.

Repeater Committee: Mike Keech VK2DFK, Morry Van De Vorstenbosch VK2EMV, Ian Callcott VK2EXN, Dave Colless VK2EZY, Fred Zickar VK2YSB.

EME Co-ordinator: Lyle Patison VK2ALU.

Broadcast Officer: Dave Collèss VK2EZY.

QSL's IN: Mike Keech VK2DFK and OUT: Ian Callcott VK2EXN.

Propagator Editor & Staff: Dave Myers, Editor VK2DFL, Ken Frost VK2DOI, Cartoonist Brian Wade VK2AXI.

Store: Ray Ball VK2PHD/XCC

Publicity Officer: Nora Fisher, 17 Elizabeth Street, Mangerton. 2500.

Awards Manager: Jim Hayes VK2KJJ.

LifeMembers: Graeme Dowse VK2CAG, Keith Curle VK2OB