

THE PROPAGATOR

NO. 3/77

MARCH 1977

NO. 3/77

THE MONTHLY NEWSLETTER OF THE ILLAWARRA AMATEUR RADIO SOCIETY

A Member Club of the Wireless Institute of Australia.
Published by the Illawarra Amateur Radio Society
P.O. Box 1838
WOLLONGONG. 2500

PRESIDENT

Bill Calvert VK2DJ
19 Springfield Ave.,
FIGTREE 2500
Ph. 713569

SECRETARY

Keith Curle VK2BUU
24 Beach Drive,
WOONONA 2517
Ph. 842469

NOTICE OF ANNUAL GENERAL MEETING

Members are advised that the 1977 Annual General Meeting of the Illawarra Amateur Radio Society will be held at the Wollongong Town Hall Committee Rooms on Monday 14 March 1977, commencing at 7.30 pm.

NOTICE OF MONTHLY MEETING - February 1977

Members are advised that the monthly meeting of the Illawarra Amateur Radio Society will be held at the Wollongong Town Hall Meeting Room on Monday 14th MARCH 1977 at 7.30 pm.

AGENDA

- 1 Apologies and welcome to visitors.
- 2 Minutes of previous General Meeting.
- 3 Correspondence.
- 4 Financial Report.
- 5 General Business.

FILM

This month we have ordered a film from NASA on the APPOLO 16 Luna Landing Mission.

The film includes some of the most spectacular luna photography to date.

If this film is unavailable we have requested a backup of either APPOLO 15 or APPOLO 17.

The past month has been most interesting in a number of ways. On Saturday 19 February (the day before the Gosford Field Day) I spent the day at the WIA Atchison Street Meeting with David Wordlow VK2ADW WIA Federal President, members of our NSW Divisional Council and members of various committees. The day was most informative and it again emphasised the extent of effort and time that our Divisional Council devotes to the many and various phases of our hobby. The Groups involved mainly were from C.B., Repetitors and Beacons, WICEN, Y.R.S, and Novice Groups. Progress reports were given and areas of problems were discussed.

The most interesting report came from the C.B. Investigation committee. This committee was headed by Criss 2ZDD and have spent many hours talking objectively to as many organizations and groups as possible that have an interest in C.B. radio.

As you are aware a report was issued to the Minister (I have a copy of that report) in which C.B. was discussed and 3 proposals were put forward. The 2 basic proposals for consideration are:-

- a. 18 channels at 27MHZ
- b. 99 channels at 540MHZ

Following is a brief summary of the feeling of different groups.

- 1 Military - totally opposed to HF (27MHZ).
- 2 Police - totally opposed to all - UHF if we must have C.B.
- 3 Civil Defence - totally opposed to 27MHZ - UHF (540MHZ) OK.
- 4 Life Saving Groups - not interested in commenting.
- 5 Labour Minister - strong support for UHF.
- 6 Liberal Minister - strong support for UHF.
- 7 C.B. Groups - a big split here - those pushing the safety aspect of C.B. such as CREST are strongly in favour of the 540MHZ UHF allocation - Those with 27MHZ Equipment want the 27MHZ of course (Remember the 2 meter band plans "we don't want to change, we've got our crystals") Also those wishing to work DX.
- 8 Citizens Amateur Radio Committee want 27MHZ now with 540MHZ available within the next 3 years. They also want an exam similar to that used to obtain a drivers licence (ie from a standard set of questions and answers.
- 9 The ATDA Union (Manufacturing unions) strong support of UHF as a boost to the economy.
- 10 Manufacturers of Equipment - strong support of UHF - currently testing 99 channel synthesised SSP units with a proposed sale price of \$350.
- 11 WIA strongly in favour of C.B. - Strong support of the 540MHZ allocation on a technical basis due to skip and channel availability. Also if CB gets 27MHZ Amateurs loose this allocation. P & T will not allow a shared basis.

The second major issue is of interest and concern I hope to all WIA members. In past years it has always been difficult to get people to serve on the NSW Council due to the long hours which was expected from each member to keep the machinery of our organisation operating. This year we have a different story with I think 21 nominations for the 7 positions on council and those eligible to vote will soon receive the ballot paper and other information.

The committee of the IARC would like you all to take an interest in these elections as the outcome can have far reaching effects on the running of this Division and even as far as WARC79. The existing NSW Council we consider have been doing a very good job and the level of contact we have established through my position as IARC. WIA representative and an Alternate Federal Counciller have been very beneficial to the Illawarra.

So we ask you to carefully consider the job to be done, the nominee and the time each will be able to spend in actual work in Sydney as the need dictates and cast your vote accordingly.

As a matter of interest to those who wish to be kept up to date on the running of our Division this election is costing us in the vicinity of \$400 so it is important to take an active interest in the issue and vote.

73's

Geoff AX2ZHU

TREASURERS REPORT

Once again we have come to the end of the financial year with a healthy cash balance. This is a good thing, mainly because it enables the Club to buy equipment in bulk for resale to members at very low prices. For instance the last of the new ex P.M.G. gear we bought in December will be on sale at this meeting at prices so low that we again will have to ballot for the privilege of purchasing it.

We can sell equipment or components very cheaply only if we buy it very cheaply. If you see such an opportunity, let a committee member know about it as quickly as possible.

The monthly raffles were very profitable this year because of the good type of item raffled and the fact that four of the prizes were donated, by Garry ZQM, Peter ZXL and Barry FE. Thank you chaps.

Our turnover is increasing year by year, total receipts for this year being \$1800. This involves a bit of bookkeeping, but thanks to our honorary auditor Allan Coote who set up a simple but effective accounting system, the task is not too onerous.

SALE OF EX P.M.G. EQUIPMENT

The last of the ex P.M.G. equipment will be on sale, by ballot, at this meeting.

RAFFLE

This months raffle has not yet been decided on exactly but it will consist of a set of tools for the "HAM SHACK" or a tool to the value of \$25. Our purchasing officer Keith 2BUU has been instructed to get the best value for money - so it should be a good prize.

AX CALLS

Don't forget that you can now use the AX prefix on your call sign (instead of the VK). This authorisation extends from the 1 March until the 31 March 1977 and is to commemorate the visit of H.M. The Queen to Australia.

MACLEEC

83 Princes Highway Fairy Meadow
as from Monday 14th Feb. 1977
our new address will be
99 KENNY STREET WOLLONGONG 2500
PHONE 291455

KENWOOD TS820 when only the best will do. 160-10 metres.
Full speech Processor- Variable I.F.-SSB-CW-FSK.
Speech Monitor-True Digital Readout (optional)
RTTY Patch Etc. Etc P.O.A.

KENWOOD TS520. Rapidly becoming the most popular transceiver
on the Amateur Market. 80-10 metres. AC or DC speech compressor
and excellent Audio quality \$660

KENWOOD HC2 **HAMCLOCK**.
Attractive and versatile timepiece that shows at a glance the
call Prefix and time of most countries.....\$29.50

HANSEN FS5 Power Meter.
Scaled 0-10 watts and 0-100 watts also VSWR. Dual impedance
50-75 OHM. For optimum performance from your transmitter
you will get it with this one..... \$29.50

MIDLAND 13-893 27 MHz Mobile Transceiver. Has upper and
lower Sideband 15 Watts P.E.P. 5 Watts A.M. Clarifier, RF gain-
Mic Gain-Double conversion Superhet front end. Comes complete
with mic mounting Kit..... \$279

We also have a range of test equipment- C.R.O's- signal
Generators- Mobile Antennae etc.

NOTE NEW ADDRESS AS FROM MONDAY 14th FEB.
99 KENNY STREET WOLLONGONG. PHONE 291455
or Contact BARRY HARTLEY VK2FE

Moonbounce Report March 1977.

Tests were scheduled for 26th Feb. with W4WD and W6ABN.

Nothing was heard from W4WD. Signals from W6ABN were not loud enough to make a contact possible and he has since advised by mail that his gear is not quite up to moonbounce standard as yet.

A $\frac{1}{2}$ hour 'VK2AMW CQ Period' then followed, during which we were called by a weak station which we could not identify. He faded out after 10 minutes. Other stations were heard during this period, carrying out their scheduled tests on 432.040, 432.050 and 432.060MHz. Our echoes were peaking up to 6dB over noise during these tests.

QSL cards were received from WB5LUA and F2TU during the month.

Lyle VK2ALU.

WANTED Contacts on 70cm. SSB. Can operate between 432.100 and 432.200MHz with 200 watts PEP transmitter output and approx. 3kw. PEP ERP from antenna. Please contact VK2ALU, address as in Callbook, for any tests desired. May also be able to organise RTTY on above frequencies, with 100watts transmitter output, if anyone interested.

Trading Post.

Bulli Scouts have a high band Pye Ranger complete with rocks that they would like to exchange for an ex disposals type rig that would work on the 80 metre Novice Band. If you can help please notify Keith. VK2BUU.

Basil Dale is after a couple of dozen MR3s suitable for spares. If you don't have a couple of dozen one will do for a start. If you can help please let Keith VK2BUU know about it.

TECHNICAL COLLEGE COURSE.

Brian VK2YAW reports that so far 24 students have enrolled for the AMATEUR RADIO course at Wollongong Tech. College. The course covers both Novice and AOCF phases. This should be the means of many an aspiring amateur to get on the air & we wish both the groups the best of luck with it. Novices have at least one large step up the ladder past them and who knows, we may finish up with 24 new "Hams" in the district.

VK2AMW Moonbounce Project - Annual Report - March 1977.

The 12 month period commenced with Charlie VK2ZEN and Charles VK2MT carrying out the tests in the absence of VK2ALU. Tom VK2ABI, Ken Grimm and Ian & Bruce Proctor also assisted until 2ALU got back on deck in July. A number of visitors were also present during tests on occasions.

Results of Tests

VK2AMW was scheduled for 48 EME tests and 11 CQ periods over the 12 months. We had contacts with 12 different stations, as follows WJAA, K3PGP, W4WD, WB5LUA, W4NUS, VE4JX, VE7B9G, JA1ATL, JA1VDV, F2TU, PA0SSB, LX1DB, SM5LE and FY7AS. We also heard or were heard by a number of other stations but not well enough to make contacts.

VK2AMW has now contacted a total of 25 different stations in 10 countries on 432MHz, but we are still waiting to contact a VK station by this means (the EME path).

Special Tests

We participated in a special test with the Stanford Research Group in USA in May. Signals from their station, WA6LET, being the loudest EME signals heard during the year, at 20dB peak above noise.

The most interesting experiments for the year were made during the almost total eclipse of the sun on 23rd October, when VK2AMW echoes were received from the moon when it was directly in front of the sun. This allowed checks to be made on rotation of polarisation of signals as they passed through the ionosphere under these conditions. Measurements were also made of 70cm. radio emissions from the corona of the sun as distinct from those emitted from the sun's disc.

Equipment

Only minor changes were required to be made to the equipment, which operated very reliably during this 12 month period.

The next development to improve efficiency, is likely to be a modified form of antenna feed, which would convert the present crossed dipole arrangement into a dipole excited section of waveguide, to give more even illumination of the parabolic reflector.

432MHz EME Activity

Several dozen stations are now being regularly scheduled over the EME test weekends each month in addition to QSO's which take place as a result of CQ's. New stations are appearing nearly every month.

Frequencies in regular use include 432.000, .005, .010, .015, .020, .035, .040, .045, .050 and 432.060MHz so anyone contemplating EME work on 70cms. should be prepared to cover at least the band segment from 432,000 to 432.050MHz.

The VK2AMW group has been active now for over 7 years. The assistance rendered over this last 12 month period by Charlie, VK2ZEN is particularly acknowledged, without which we would not have been able to meet our scheduled EME test arrangements on many occasions.

Lyle VK2ALU.
EME Group Coordinator.

ILLAWARRA AMATEUR RADIO SOCIETY.

PRESIDENTS REPORT. 1976-77.

That time of year has come around once more, when we look back over the past year with a critical eye.

We have now had a full year of operations as the Illawarra Amateur Radio Society, and I think you will agree it has been a successful year.

As in the past, we have continued to keep the business side of running the Society out of the Monthly Meetings in order to allow time for films, lectures, etc., as well as the popular activity of "rag chewing". During the year we had a variety of talks; in particular the Trade Display by Peter Schulz and also the Talk given by John Milton proved to be the most popular.

During the year, a new phase of Amateur Radio activity got under way, although a little behind schedule, and we now have Novice Operators. It is hoped that this will enable more aspiring Amateurs to get on the air, with a general increase in Amateur activity.

As far as the Wireless Institute Of Australia is concerned, we have been kept well informed of activities and have had our views expressed to the W.I.A. in several matters of concern. It is interesting to note that the "Propagator" has been quoted regularly in "Amateur Radio" in the VHF-UHF columns, and also managed a quote in the Editorial section in the January '77 issue.

Activities in the Emergency Communications field saw an increase during the year with the reactivation of WICEN. A liason with the Illawarra Division of S.E.S. and Wollongong Police was established through the efforts of Jim Potts, and we hope to maintain activity with organised exercises. Three such exercises were held during the past year, and were very successful.

Both Moonbounce and Repeater activities continued during the year. Once again the Repeater suffered lightning damage, but a concerted effort had it soon back on air. It is pleasing to again report that our Repeater is still considered to be the best in NSW and credit for this must be given to Graeme VK2AGV and his helpers.

On the financial side, we now stand in credit to the tune of about \$800 - a very satisfactory position. Thoughts have been given to use some of our gains to further develop the Repeater. The activities of our Store have continued as our chief source of revenue and in this respect our thanks are due to Bill VK2DJ and Charles VK2ZEN.

My own activities this year have been somewhat disrupted and I must thank Bill VK2DJ for stepping into the President's shoes, as well as Geoff VK2ZHU for taking over as Editor of the Propagator.

Once again, I ask that each of you ask yourself the question "What can I do for the Society?" Our activities have been kept at a good level during the year, mainly due to the work done by members of Committee; a job which has indeed been a pleasure. I trust that when nominations are called for at the Annual General Meeting this month, there will be a good response of members prepared to contribute to the running of the Society.

Finally my thanks to Keith VK2BBU for his assistance as Secretary - no group can function without a good scribe.

Jan Cameron

President

AMATEUR RADIO COURSE, 1977

The course will cover the theory, regulations, and morse code needed for the novice, limited, and full amateur licences.

LOCATION: Wollongong Technical College, Matthews Building, room 216 (see map below).

TIME: 6 p.m. to 9 p.m. on Friday nights, starting on Friday 18th February.

ENROLMENT: Enrol on the first night of the course, Friday 18th February, at room 216. Fees are only \$2 .

RECOMMENDED STARTING TEXTS:

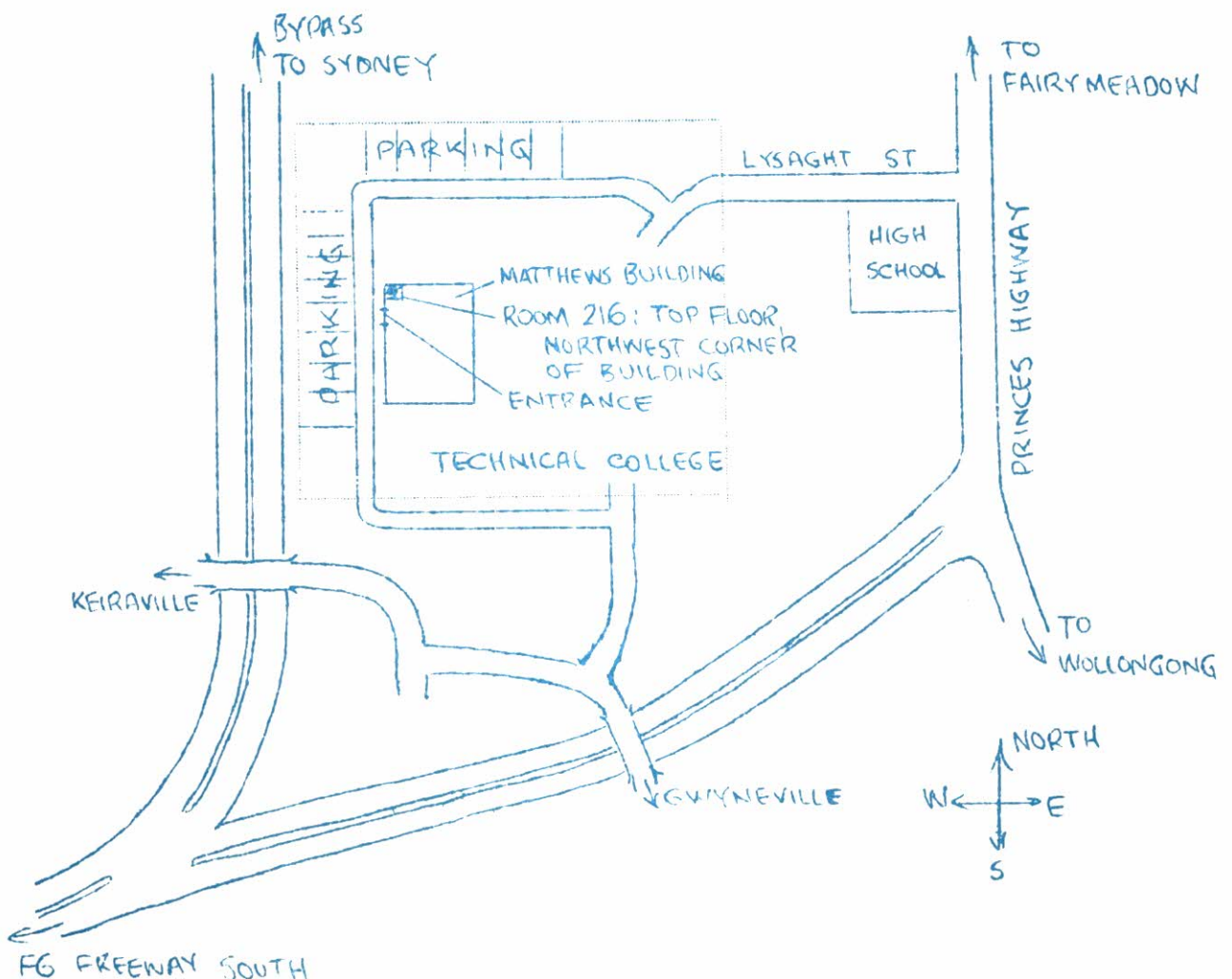
"Questions and Answers for the Novice Licence"

- published by Westlakes Radio Club

"Basic Electronics"

- published by "Electronics Australia"

FURTHER INFORMATION: Contact Brian Wade, VK2YAW. Phone (home) 84-1381.



SCOTCHCAL

Photosensitive panel material for making professional looking front panels to pretty up your gear. See article in November issue.

Sheet size 10" x 12" \$3.50

BOOKS

Basic Electronics A very useful book, especially for beginners. Published by Electronics Australia. \$3.00

Projects and Circuits Over thirty Electronics Australia projects combined into a book of 112 pages. \$1.50

Westlakes Novice Licence Manual This excellent book is being revised. At the time of writing, we have run out of copies for sale, but we might have supplies of the revised Manual by this meeting.

GENERAL

Pair meter leads with alligator clips	50c
Vernier dials 35 mm. 4 turns knob for $\frac{1}{2}$ turn dial	\$1.50
DPDT slide switches	25c
Four pin plug and socket - pair	15c
Alligator clips - large, insulated. Red or Black	20c
Ground Plane Antenna Base	\$1.00
Edge connectors	\$1.00
Tag strips	10c

CONDENSERS

Ceramic trimmer, mica insulation	30c
Small solder type feed through capacitors	5c
Wire wrap type trimmers	10c
Ceramic bolt-down trimmers	10c
25V Electrolytics, double ended	
4.7 uF	6c
100 uF	12c
220 uF	15c
470 uF	20c
Greencaps 100V	
.0047, .002	8c

NEOSID

Formers	8c
Balun formers - small	12c
- large	15c
Cans - single	10c
- double	12c
Slugs - P.16,	7c

METERS

S Meter 400uA $1\frac{3}{8}$ " x $5/8$ "	\$2.50
Level Meter dual 200uA meters, illuminated	\$3.00
0 - 1 mA Meter 50mm square	\$4.00
0 - 1 mA Meter 75mm x 50mm.	\$5.00

RESISTORS

Bag of 160 $\frac{1}{2}$ watt resistors.
10 each of values 10, 47, 68, 100, 220, 470, 680, \$4.00
1K, 2.2K, 4.7K, 6.8K, 10K, 22K, 47K, 68K, and 100K.

ANTENNA WIRE

Bronze alloy wire, single strand, 1.2mm diameter. See sample at meeting.
Lengths cut to order 5c/metre

The I.A.R.S. Store is stocked with selected purchases of good quality components. A small profit is marked up on these items yet prices are very reasonable. The profit goes towards expanding the range of items kept in stock.

Bring your money on meeting nights and keep stocked up with those often needed components.

I.A.R.S.
P.O. BOX 1838,
WOLLONGONG. NSW. 2500.

MR.L. PATISON VK2ALU
98 HEASLIP STREET
WOLLONGONG
2500
94

THE PROPAGATOR.
Newsletter of the Illawarra
Amateur Radio Society.

