

# THE PROPAGATOR

NO 12/77

DECEMBER 1977

NO12/77

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.

PO Box 1838  
WOLLONGONG NSW 2500

PRESIDENT

Bill Valvert VK2DJ  
19 Springfield Avenue  
FIGTREE 2525

Phone No: 71 3569

SECRETARY

Brian Boseley VK2BCI  
Figtree Hotel  
FIGTREE 2525

NOTICE OF MONTHLY MEETING - DECEMBER 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 12 December 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.
- 6 Lecture.
- 7 Drawing of WARC 79 Raffle.

LECTURE

This month we do not have a lecture set up just yet but listen to the broadcast on Sunday for any further developments. If you listen to John 2BHO giving the broadcast please call back after it to let us know of your interest.

GEOFF 2ZHU

Moonbounce Report - December 1977.

Still no more EME tests carried out since the last report because of absence of test schedules. The 432 EME News for December has not yet been received.

A letter has been sent to K2UYH to ensure that our mail problem is publicised. We can only hope that this sorts itself out soon.

The details of the newly designed hybrid for achieving circular polarisation from the feed dipoles have been received and is being looked at to see if it is applicable to our feed arrangement.

Contact is being maintained with the City Council with regard to their proposals for a possible garbage dump in the area of the dish site. Nothing has been finalised yet.

We are looking forward to increased activity in the New Year.

Oscar Satellite Activity.

It has been noted that the Satellite has been operating in Mode A instead of Mode B on several occasions last month. This was corrected prior to the next Mode B period. I have been told that this may have followed the use of excessive power transmissions by some stations in the Northern Hemisphere. 100 watts ERP is more than adequate.

Very interesting visits were made to the QTH's of Oscar stations VK3ZBB and VK3ACR while in Melbourne last month.

Several new stations (for me ) were worked on Mode B last month.

RTTY Activity in the Wollongong Area.

How about one of you keen RTTYers in this area running an item in the Propagator? I'm only a beginner in this field (you can do only so much in the hobby time available!!) and am sure that we would all like to hear what is going on. My thanks to Richard Ewell (hope I've spelled your name right!) for help with the Model 14 Reperforator, and clues on its operation which will be a big assistance in getting the system working.

Lyle VK2ALU.

FOR SALE

KENWOOD SSB Transceiver. T.S. 520, complete with a DC-DC converter.

Ten months old - \$575 - no offers.

Contact Ian Miller VK2NJM on 83 2653

WANTED

Adds for this page - especially for equipment you are not using that could assist a novice to get on the air.

Contact G Cuthbert VK2ZHU at the meeting or Post Office Box 1838  
WOLLONGONG

FOR SALE

COLLINS R309A Receiver. Digital Readout. The ultimate in receivers - variable bandpass of 100 HZ to 16KHZ. (EX-GOVERNMENT TYPE UNIT).

\$400

Contact B Hartley Phone No. 29 1276 After Hours 84 2439

FOR SALE

YAESU Linea Amplifier model SL2100B. This unit is as new complete with Handbooks.

\$425

Contact B Hartley Phone No. 29 1276 After Hours 84 2439

NEXT MEETING

Don't forget that there is no meeting in January so that the next meeting is on 13 February 1978.

\*\* A MERRY CHRISTMAS AND A HAPPY NEW YEAR FROM THE COMMITTEE \*\*  
\*\* OF THE ILLAWARRA AMATEUR RADIO SOCIETY \*\*

COMPONENTS FOR SALE

ADDITIONAL ITEMS IN STORE.

BC.109	20 Cents.
MPF.131	85 cents.
5486 FETS	65 cents.
1N4148	10 cents
OA91	12 cents

DISC CAPACITORS.

.001	6 cents
.0047	6 cents
.01	6 cents
.022	6 cents
.047	8 cents
.1	10 cents

TANTALUM CAPS.

.47 MF	17 Cents	10 MF	25 cents
.1 MF	17 Cents	22 MF	45 cents
4.7 MF	18 cents	47 MF	65 cents

Pair meter leads with alligator clips	50c
Vernier dials 35 mm. 4 turns knob for 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

10c ea.  
\$1.00 ea.  
10c ea.  
\$6.00 ea.

"BELLING LEE" MOBILE ANTENNA BASES \$4.00 EACH.

NEOSID

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

NEW STORES ITEMS.

3 -13pF trimmers for PCB mounting  
12" x 6" approx. fibreglass PCB.  
Coil former complete with can  
2" sq. 100mA centre zero meters.

METERS

S Meter 400uA 1 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 1/2 watt resistors, 10 each of values 10, 47, 68, 100, 220, 470, 680, 1K, 2.2K, 4.7K, 6.8K, 10K, 22K, 47K, 68K, and 100K.	\$4.00
--	--------

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.

## AMATEUR RADIO COURSE, 1978

In 1978, the School of General Studies within the Wollongong Technical College will be running an approved course in Electronics, which will cover all the work needed to obtain a Novice, Limited, or Full Amateur Licence.

TIME: The course starts on Friday 17th February, at 6 p.m. to 9 p.m.  
It will then continue weekly at the same time.

LOCATION: Wollongong Technical College, Matthews Building, Room 213  
(see map below).

ENROLMENT DETAILS: Enrol on the first night of the course, Friday 17th February, at room 213. (If you miss the first night, enrol on the second night.) Fee is \$2.

### COURSE INFORMATION:

The Novice section of the course assumes no previous knowledge of electronics or radio. Starting from scratch, it will prepare you for the Novice Licence Examination in October.

Recommended Novice Study Materials: (Available at the class)

"Questions and Answers for the Novice Licence" - published by Westlakes Radio Club. \$3-50

"Handbook for Operators of Radio Stations in the Amateur Service" - published by P & T Department. 30¢.

Beginner's Morse Code Cassette. \$2-00

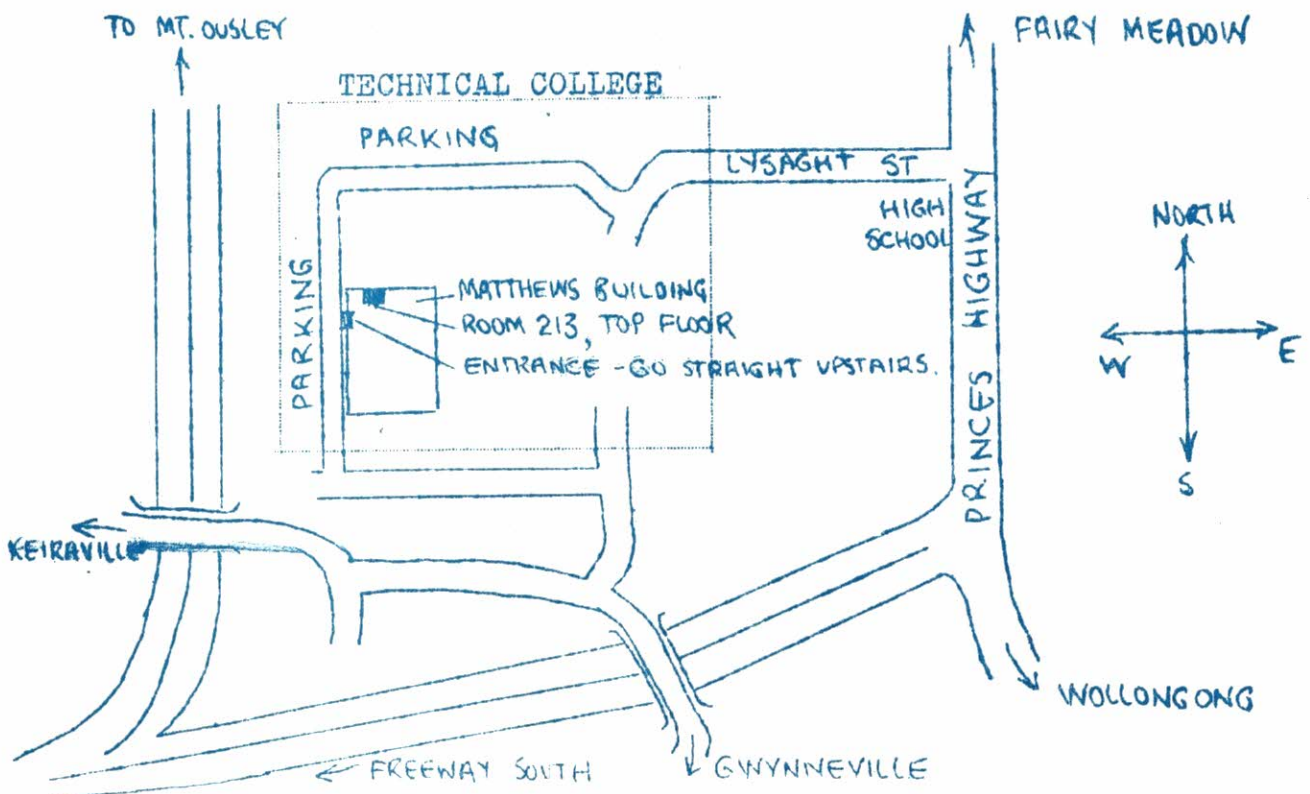
The Advanced Section of the course starts where the novice section finishes, so you can upgrade your novice licence to a limited or full licence at the August examination.

Note - If you have a limited licence, you can take morse code by itself to upgrade to a full licence.

Recommended Advanced Texts:  
The R.S.G.B. Handbook.  
The A.R.R.L. Handbook.

### FURTHER INFORMATION:

Contact Brian Wade, VK2AXI. Phone (after hours) 84-1381.



# Sideband Electronics Sales

## HF TRANSCEIVERS

<b>ASTRO</b> - 200 digital solid state 200 W.P.E.P.	<b>\$1000</b>
<b>TRIO KENWOOD</b> new model TS-520-S 160 to 10 M, with optional digital readout connected externally. Can be used as a frequency counter self contained separately powered by 12 volt DC. Price will be shortly announced.	
<b>TRIO KENWOOD</b> model TS-820S AC only 160 to 10 M with digital readout.	<b>\$1000</b>
<b>TRIO KENWOOD</b> model TS-820 AC only 160 to 10 M.	<b>\$850</b>
<b>TRIO KENWOOD</b> model MC-50 Microphone.	<b>\$ 49</b>
<b>TRIO KENWOOD</b> model TS-700 - A FM-AM- CW-SSB transceivers. Full 144-148 MHz coverage, 10-Watt output, VFO controlled, self-contained, AC-DC operation.	<b>\$650</b>
<b>TRIO KENWOOD</b> model TS-600-A FM-AM. SSB transceiver full 50-54 MHz coverage 10 Watt output variable from 1 Watt to full power. VFO controlled AC-DC operation. Styling as TS-700-A.	<b>\$650</b>
<b>TRIO KENWOOD</b> model TR-7400 2 meter FM transceiver 10 to 25 watts output. Frequency range 144.00 to 147.995 MHz No. of channels 800, Double conversion super- heterodine sensitivity better than 0.4 UV for 20 DB.	<b>\$385</b>
Universe 224 model 15 watts pep 23 channel AM SSB for as low as	<b>\$215</b>
Universe base 240V and 12V DC. The best value for money	<b>\$260</b>

## ICOM

### VHF TRANSCEIVERS SSB

<b>ICOM</b> model IC-202 2 M SSB portable trans- ceiver 144-144.4 MHz	<b>\$215</b>
<b>ICOM 22-S</b> synthesized 22 channel 2 M transceiver 10 channel pre programmed. Supplied with 50 extra diodes for the programming.	<b>\$269</b>
<b>ICOM</b> model IC-502 6 M SSB portable trans- ceivers 52-53 MHz.	<b>\$215</b>
<b>YAESU MUSEN</b> model FT-101-E AC-DC transceivers 10 to 160 M with speech processor	<b>\$800</b>
<b>YAESU MUSEN</b> model FT-301.	<b>\$960</b>
<b>YAESU MUSEN</b> model FT-301 - D	<b>\$1140</b>
<b>YAESU MUSEN</b> model FT-301 - S	<b>\$660</b>
<b>YAESU MUSEN</b> model FL-2100-B Lineal Ampl.	<b>\$525</b>
<b>YAESU MUSEN</b> model FP-301	<b>\$165</b>
<b>YAESU MUSEN</b> FR G-7 Uses Wadley loop princ.	<b>\$300</b>
<b>YAESU MUSEN</b> FT221-R 2 meter all mode receiver.	<b>\$628</b>

## FREQUENCY COUNTERS

<b>YAESU MUSEN</b> model YC-500-E-S-J	<b>P.O.A.</b>
---------------------------------------	---------------

## AUSTRALIA'S SOLE DIST. OF KLM PRODUCTS

<b>KLM SOLID STATE POWER AMPLIFIERS</b>		
(MHz) 144-148 PA10- 80BL	80	OUTPUT (watts)
" PA10-140BL	140	"
" PA10-160BL	160	"
" PA 2- 70BL	70	"
400-470 PA10- 70CL	70	"
PA 2- 12-B	12	Watts
PA 2- 25BL	25	Watts
		<b>P.O.A.</b>

## HY-GAIN ANTENNAS

18AVT-WB 10-80 M. verticals, 23' tall no guys	<b>\$ 95</b>
TH3MK3 10-15-20 senior 3 el. Yagi 14' boom	<b>\$220</b>
TH6DXX 10-15-20 senior 6 el. Yagi 24' boom	<b>\$250</b>
HY-QUAD 10-15-20 cubical quad Yagi 8' boom	<b>\$250</b>
TIGER ARRAY 204BA 20M4 el. Yagi 26' boom	<b>\$250</b>
BN-86 balun for beam purchases only	<b>\$ 25</b>

## MARK MOBILE ANTENNAS

HW-80, 6' long for 80 M.	<b>\$ 28</b>
HW-40, 6' long for 40 M.	<b>\$ 25</b>
HW-20, 6' long for 20 M.	<b>\$ 23</b>
Swivel mounts & chrome-plated springs for all	<b>\$ 13</b>

## CUSH CRAFT ANTENNAS

A144-11 11 Element 2M-Yagi	<b>\$ 45</b>
A147-11 11 Element 2 M Yagi	<b>\$ 45</b>
A147-20 combination horizontal vertical 2 M	<b>\$ 70</b>

## ANTENNA ROTATORS

Model CDR Ham-11 for all hf beams except 40 M	<b>\$200</b>
Model CDR AR-22 L junior rotator for small beams	<b>\$ 65</b>
KEN model KR-400 for all medium size hf beams with internal disc brake	<b>\$110</b>

All models rotators come complete with 230-  
volt AC indicator-control units.

6-conductor cable for  
KR-400-500 **65 cents per metre**

## COAX CABLE CONNECTORS

PL-259	<b>\$1.20</b>
SO-239 Chassi Mount	<b>\$1.20</b>
Male to male joiner	<b>\$1.20</b>
Female to female joiner	<b>\$1.20</b>
Angle connector	<b>\$1.70</b>
T-connector	<b>\$2.00</b>

## COAX CABLE

RG-8 - U foam filled	per metre	<b>\$1.20</b>
----------------------	-----------	---------------

## SWR METER

Twin meter model: Y.M. I.E. 3.5 to 145 MHz prof quality	<b>\$ 28</b>
DRAKE TV-3300 TVI lowpass filter	<b>\$ 31</b>
SSR-1 Receivers	<b>\$270</b>

## CRYSTAL FILTER, 9 MHz, similar to

FT-200 ones. With carrier crystals. Soon Avail.	<b>\$ 15</b>
APOLLO 3 position co-ax switches	

All prices quoted are net SYDNEY, N.S.W., on cash-with-order basis, sales tax included in all cases, but  
subject to changes without prior notice. ALL-RISK INSURANCE from now on free with all orders over  
\$100; small orders add 50c for insurance. Allow for freight, postage or carriage; excess remitted will be  
refunded.

# Sideband Electronics Sales

For personal attention: 24 KURRI STREET, LOFTUS

P.O. BOX 184, SUTHERLAND, 2232

OPEN ON SATURDAYS TILL 12 NOON

TELEPHONE: 521-7573

PETER SCHULZ, VK2ZXL

Amateur Radio August 1977 Page 13

## WIRELESS INSTITUTE OF AUSTRALIA

Application for membership forms are available from  
Geoff Cuthbert, VK2ZHU, or direct from The New South Wales  
Division of the W.I.A., 14 Atcheson St., Crows Nest, NSW. 2065.

An organisation is only as strong as its members, so lets  
see what you can do towards reaching the target membership  
of 8000.

MACELEC  
99 KENNY STREET WOLLONGONG  
PHONE 29 1455



TS 820	H. F. Transceiver 10-160M.....	\$960.00
DGI	Digital Display for TS820.....	\$160.00
TS 520S	H.F. Transceiver 10 - 160M.....	\$699.00
DG5	Digital Display / Frequency Counter for TS 520 .....	\$170.00
TS 600	All mode 6 metre Transceiver.....	\$734.00
TS 700	All mode 2 metre Transceiver.....	\$675.00
SP 520	Extension Speaker to suit TS520-820.....	\$ 36.00
TR2200A	2 metre FM Portable.....	\$192.00
TR7200	2 metre FM Mobile.....	\$249.00
TR3200	70CM FM Portable.....	\$291.00
TR7400A	2 metre FM Digital 25W Mobile.....	\$444.00
R300	Communications Receiver.....	\$260.00
MC 50	Desk Microphone.....	\$ 49.00
MC 10	Hand Microphone.....	\$ 13.00
HC 2	Ham Clock.....	\$ 32.00
M 25	2 Metre Hi-Gain Mobile Antenna.....	\$ 17.25
MB	Mobile Base only.....	\$ 3.62
M25T	2 Metre Hi-Gain (Top Only).....	\$ 13.75
Hansen FS5	SWR - Power Meter.....	\$ 36.00
Hansen SWR - 6	Field Strength - SWR Meter.....	\$ 26.00
B & K 1827	6 Digit Auto Ranging Frequency Counter.....	\$228.85
	100 HZ - 30 MHZ.	



We also stock a range of Audio Generators - Signal Generators  
Digital Multimeters - Power Supplies ETC.

MACELEC  
99 KENNY STREET WOLLONGONG  
PHONE 29 291455 OR CONTACT BARRY HARTLEY VK2EE

\*Prices subject to change without Notice,

---

WOLLONGONG, NSW 2500

P.O. Box 1838,

I.A.R.S.

THE PROPAGATOR  
Newsletter of the Illawarra  
Amateur Radio Society  
Registered for posting as a publication  
CATEGORY B.

I.A.R.S.  
POSTAGE PAID  
WOLLONGONG  
N.S.W.  
AUSTRALIA  
2500

---

THE PROPAGATOR