

# THE PROPAGATOR

THE MONTHLY NEWSLETTER OF THE  
ILLAWARRA AMATEUR RADIO SOCIETY  
A MEMBER SOCIETY OF THE WIRELESS INSTITUTE OF AUSTRALIA

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NOTICE OF GENERAL MEETING

Members are advised that the next GENERAL MEETING of the Illawarra Amateur Radio Society will be held at the Wollongong Town Hall Committee Room on Monday, 10th NOVEMBER at 7.30 p.m.

AGENDA.

- 1) Apologies and welcome to new members and visitors.
  - 2) Minutes of previous meeting.
  - 3) Correspondence.
  - 4) Financial Report.
  - 5) General Business
  - 6) Raffle.
  - 7) Lecture.
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## COMPONENTS FOR SALE

When we found that the sale of the Bill-Dit 2 meter transceiver kit was so successful, we decided to sell a few types of components, both as a service to members and to make some money to keep the I.A.R.S. solvent without increasing membership fees.

Components sold are either standard lines such as resistors and condensers which we can buy at a reasonable price in quantity or odd lines that we come across, such as the trimmers and meters, which we bought (and are selling) very cheaply.

If you come across any odd lots of interesting looking electronic parts that we can sell cheaply, please let one of the committee members know.

Components listed below are available for sale at this meeting or by mail order, subject to prior sale.

### ITEMS FOR SALE :

#### GREENCAP CONDENSERS 100V

These are still selling steadily at about 100 per month.

.0047, .01, .022

8c each

.047, .1,

12c each

#### BASIC ELECTRONICS

A basic text published by Electronics Australia.

\$3.00 per copy

11 of the first dozen sold, 1 to go.

#### METERS

This was one of our luckier buys.

1. 5 Meter 400 uA movement, calibrated in S units  
1 to 9 and 10 to 40 over S9. Cutout size  $1\frac{3}{8}$ " x  $5\frac{5}{8}$ " \$2.50
2. Level Meter This is a dual movement meter indicating L and R level. Each side from -20 to +3. Each movement is 200 uA F.S.D. The dual scale is translucent, for illumination from the back. Very pretty. Cutout size  $1\frac{7}{8}$ " x  $1\frac{1}{2}$ ". Probably the same as the meter used in an Electronics Australia mixer/preamplifier project a few months ago. \$3.00
3. 0 - 1mA Meter A standard 2" square meter. \$4.00
4. 0 - 1mA Meter A standard 3" x 2" meter. \$5.00
5. 0 - 10A Meter A standard 3" x 2" meter. \$5.00

#### RESISTORS - Just received.

Bags of 140  $\frac{1}{2}$ W resistors.

10 each of 14 values : 10, 22, 47, 82, 100, 220, 470, ohm  
1K, 2.2K, 4.7K, 10K, 22K, 47K, 100K.

\$3.00 per bag

#### MAIL ORDERS

Postage cost is 15c for a juffy bag and 30c for the stamps. All mail orders to the Secretary,  
Box 110 P.O.  
DAPTO 2530.

The Lecture this month will be on Moonbounce - and who else better equipped to give it than Lyle 2ALU. Lyle has given talks at various other clubs recently so he should have his talk down to a fine art.

The raffle is another "Super" one and will be a 24 hour clock (digital) I hate to think of the price - that is if it is delivered in time. Failing that we will be raffling off a Mini-Drill which is ideal for drilling printed circuits etc.

Jim Potts 2BBG is the Official Wicen Coordinator for the Illawarra District and will act as area liason with the State Civil Emergency Service. I feel sure Jim will do a fine job and even if Mount Keira erupts we will be in good hands.

Keith 2ZYI.



## WOLLONGONG REPEATER NEWS

Since channel 6 was installed at Robertson on 16th September, it was failed once after Static Discharges during a thunderstorm damaged the audio and regulator transistors in the receiver.

Neon Lamps and lighting arrestors have now been fitted across the landline to help prevent this from happening again.

There appears to be an intermittent noise coming up on weak signals into the repeater after several hours of constant use. It could be an overheating problem in the P.A. Stage, and this will be investigated when the weather allows.

Coverage of the repeater is good around Wollongong down to Kiama and up North to Sydney. The coastal escarpment causes some shielding on the coast north of Corrimal but it is useable with some weak areas close to the mountains. South of Kiama signals are Patchy right down to Ulladulla. Signals are excellent along the Hume Highway between Mittagong and Liverpool, and around the Western Suburbs of Sydney and on the North Shore.

The callsign generator (I.D. Unit) is now completed and working. We are awaiting the issue of a callsign from the P.M.G. The callsign applied for is VK2RAW with VK2RAI second choice.

When the I.D. is fitted, the repeater will identify in Morse Code at 10 W.P.M. with a tone of 590 HZ. every 5 minutes while the repeater is in use, and 5 seconds after the end of the last transmission.

If there is a blackout at Robertson, the repeater drops its power output from 90 watts to 5 watts while it is operating from batteries. In this condition the pitch of the I.D. tone will be much higher at 1750 HZ.

Ray VK2BRF in Sydney is getting ready to relay the Sunday broadcasts to Channel 6 in the near future.

Here are some of the callsigns heard working through Channel 6 since its installation.

VK2	2FE	Wollongong Area	2AJT	Nowra
	2BBG		2HQ	Sydney Area
	2DJ		2ZZV/M	
	2AGV		2ZMU	
	2PK		2AKO	
	2BLS		2BEL	
	2ALU		2KS	
	2AFF		2AGF	
	2YCH		2AOE	
	3UQ/M		2ZHE/M	
	2BZE		2ZNR	
	2YDQ	Mollymook	2ZAJ	
	2MQ	Milton	2BRF	
	2ALY	Blacktown	2AFG/M	Cosford
	2AIR	Seven Hills	2ZNS	Penrith
	2HO	St. Ives	2AMG	Glenbrook
	2AWZ/M	Ryde	2AVA	Springwood
	2BZK	Carlingford	2BPN	Epping
	2ZRQ	Berowra	2UX	Willoughby
	2ZMR/M	Hume Highway	2AQG	Lidcombe
	2ABA	Berverley Hills	2BSN	Miranda
	2ZXC	Bexley	2AFU	Lugarno
	2ZUH/M	Cambelltown	2BKL	Lakemba
	2ADD		2DF	Arncliffe
	2BOA	Hewcastle	3ZSB/M	French's Forest
	2ZRN		C21KM/MM	40 Miles South

2 METRE BAND PLAN - F. M. SECTION

FREQUENCY	REPEATERS											SIMPLEX							
	OLD				NEW							OLD				NEW			
	1	2	3	4	1	2	3	4	5	6	7	A	B	C	Q	49	50	51	Q
145.5																			
145.55																			
145.6	32 OUT																		
145.65																			
145.7	34 OUT																		
145.75																			
145.8			36 OUT																
145.85																			
145.9				38 OUT															
145.95																			
146.0																			
146.05																			
146.1	42 IN				42 IN														
146.15									43 IN										
146.2	44 IN				44 IN														
146.25									45 IN										
146.3		46 IN				46 IN													
146.35											47 IN								
146.4			48 IN				48 IN												
146.45																			
146.5																			
146.55																			
146.6																			
146.65																			
146.7					54 OUT														
146.75									53 OUT										
146.8						56 OUT													
146.85										57 OUT									
146.9							58 OUT												
146.95											59 OUT								
147.0								60 OUT											
147.05																			
147.1																			
147.15																			
147.2																			

CHANNEL Q = QUARTER CENTURY CLUB NET

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### THIS MONTHS LECTURE.

As you all know Lyle VK2ALU has been giving lectures on Moonbounce Operations to various other clubs and organizations. This month Lyle will present his lecture on the Dapto Moonbounce to us and from reports received it should prove to be a most informative and interesting lecture.

73's geoff VK2ZHU.

### Moonbounce Report-November 1975.

EME tests on 27/10 provided a first contact with K8UQA. JA1VDV was heard once more. Dr. Jones of the University of Wollongong attended this test as the new liason officer for the University on the Moonbounce Project.

Dr. Jones has carried out extensive work with large radio telescopes both in Australia and in Europe. He has been recently appointed to the staff of the University.

On 1/11 VE2ZLN operated the receiving equipment to copy signals from WAGLET, using their 150 ft. dish at the Stanford Research Institute in California USA. Signals were consistantly 15db. or so above noise!! Portions of chart recordings made were forwarded to them.

WAGLET is to carry out further 432MHz. EME tests on November 23rd, when we hope to contact them.

On 2/11, tests were made in the early hours of the morning with a number of stations in USA and Canada. WJAA was copied and later VE4JX, but they could not copy our full calls. A short then developed in our 20 volt supply cable to the preamplifier in the feed box. It was raining steadily at the time so nothing could be done to fix it.

As another series of tests were scheduled with stations in Europe and Rhodesia later in the day on 2/11 and the rain refused to let up, a large beach umbrella and a tarpaulin were rigged up on top of the feedpoint access platform and repairs were carried out (with some difficulty!!).

Unfortunately all this took so long that only 5 minutes of the last test period remained by the time that we were operational again. Our CQ's did not obtain a response in this short period. (At least we tried!!)

Lack of a dipole antenna on 15MHz is still preventing us getting essential transmitter frequency checks.

As a matter of interest, my comments on apparent lack of interest in the Project has brought a response, mainly from Sydney and Interstate, thanks to those who wrote to me.

Lyle VK2ALU.

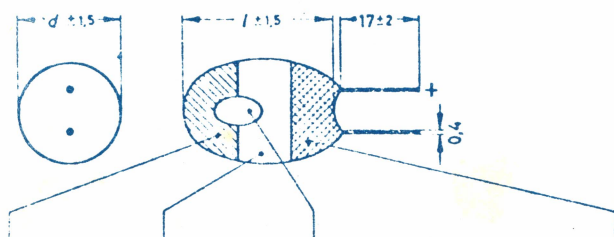
# Tantalum Capacitors TAG

Drop-form type with rated voltages of  
3.6, 6, 10, 16, 20, 25, 35 V d. c.  
Surge voltage = 1,15 x rated d. c. voltage

Design: SF (sintered anode, solid  
electrolyte), polar.

Category according to IEC: 55/85/21  
Temperature range: -55 °C to +85 °C.

Dimensions in mm  
and marking of capacity according to IEC and DIN 40820



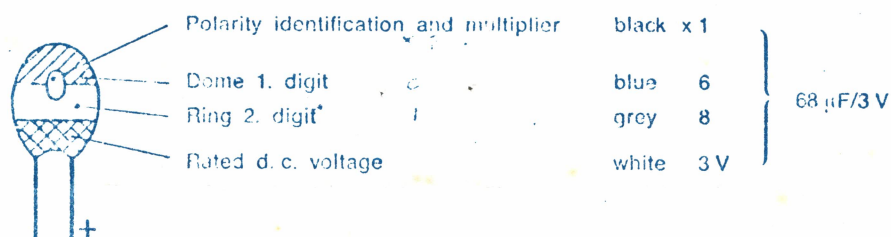
Capacity in $\mu\text{F}$			Rated d. c. voltage	
Colour	Dome 1. digit	Ring 2. digit	Dot multiplier marking of polarity	Colour Voltage
black	—	0	x 1	white 3 V
brown	1	1	x 10	yellow 6.3 V
red	2	2	x 100	black 10 V
orange	3	3	—	green 16 V
yellow	4	4	—	blue 20 V
green	5	5	—	grey 25 V
blue	6	6	—	pink 35 V
violet	7	7	—	
grey	8	8	x 0.01	
white	9	9	x 0.1	

Dimensions and Weights		
Case-size	Dimensions $d \times l$ (mm)	Weight g
1	3.5 x 6.0	0.15
2	4.0 x 6.5	0.20
3	4.0 x 7.0	0.25
4	4.5 x 7.0	0.30
5	4.5 x 7.5	0.35
6	5.5 x 8.5	0.40
7	6.0 x 8.5	0.45

Marking of capacity: colour dot indicates the polarity orientation according to drawing.

## Example of coding

Colours starting from the dome



DX PANORAMA

by Gerry VK2APG.

I haven't been doing too much DX in the last month with going down the coast a few times and all, but did manage to work a few goodies. Last weekend we took the rig and XYL to Narooma and operated portable from my mates' parents QTH which is overlooking the beach. We rigged up a ground plane on the aluminium roof and heard as well as worked some very rare stations during the CQWW phone contest.

We took the opportunity to drop in at the QTHs of Lew VK2LW and Bill VK2BWY. Lew lives in a very favourable spot on a hill at Turuss Head. Bill lives a short way from Lew's and at the time of dropping in was putting up a windmill tower to support his TA33 yag. My XYL Julia, Jim & myself would once again like to thank Lew and Bill for their hospitality during our visit. Also there is a few stations active on channel 40, namely VK2BWY, VK2FV, and VK2YDQ at Ulladulla whom we would also like to thank for the cup of coffee. The stations just mentioned are very active on Ch 40, so if going down the coast leave ur rig on and give a CQ.....

Here are a few stations of interest i have worked lately.....  
20 mx..

KX6HB	0752	Marshall Is.	OD5IO	0655	Beirut
W4EV/VP9	0718	Bermuda	EI3CM	1520	Arklow
PJ3AR	0153	<del>XXXX</del> Aruba	ZP5AO	0236	Asuncion
KP4DIW	0556	Puerto Rico	KC6QM	0921	Ponapei
GW3MWH	0709	Wales	GM3JAW	1350	Glasgow
9VLRD	1012	Singapore	HM1GX	0953	Seoul
HB9AYX	0644	Swiss	Y08AHL	0639	Romania
YS1GNG	0414	San Salvadore	YN6EC	0256	Nicaragua
6Y5HJ	0456	Jamaica	LX1JAF	0512	Luxembourg
CT2JAM	0620	St. Michael Is	IC8CQF	0610	Caprice Is.
ZB2DI	0737	Gibraltar	CT2BS	0657	Azores
9HLDV	0716	Malta	C9MJO	0232	Mozambique
FG0MM	0620	Guadelope	FY7AK	0534	French Guiana
HB0LL	0737	Lichtenstein	M1D	0676	San Merino
YZ1KO	0614	Belgrade	SP7HT	0610	Poland
HPLXDC	0619	Panama	CH2BAD	1410	Helsinki

73's chaps,

Gerry VK2APG

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AMATEUR RADIO SOCIETY  
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4 *Griffin - Fui de la*  
*C. Proctor - King & Delfo*  
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MR. L. PATISON VK2ALU  
2500  
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