

MAR

THE PROPAGATOR

MONTHLY NEWSLETTER OF THE ILLAWARRA AMATEUR RADIO SOCIETY

P.O. BOX 1838 WOLLONGONG N.S.W. 2500

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MONTHLY MEETING- Second Monday of each month, 7.30pm at:-

The Congregational Hall, Coombe St. Wollongong.

CLUB STATION- VK2AMW

CLUB REPEATERS- VK2RAW, Channel 5 2 metres.
VK2RUW, Channel 1 70 centimetres.

MONTHLY BROADCAST- 7.15pm EAST on the Sunday preceeding the meeting night. IARS Broadcast frequency:-

Repeater Ch5 or Simplex Ch40

Relay on 28.460 MHz & UHF repeater Ch1

CLUB NETS- 6 Metres 8.30am Sundays - 52.525 MHz FM.
10 Metres 8.00pm Sundays - 28.460 MHz USB.

NEXT MEETING:- 10 - MAR - 80

This coming meeting we are privileged to have JOHN MILTON VK2AQM Dist. Radio Inspector Wollongong as our guest speaker.

Members are reminded that the coming meeting will be the annual general meeting. Nominations for office bearers will be invited for the following positions:-

President
Vice President
Secretary
Treasurer
Committee members

See you at the meeting.....

EDITOR.

YOUR HORRORSCOPE

AQUARIUS Jan. 21 - Feb. 19

You have an inventive mind and are inclined to be progressive. You are a clever person. On the other hand you are inclined to be careless and impractical, causing you to make the same mistake over and over again. People think you are stupid.

PISCES Feb. 20 - Mar. 20

You have a vivid imagination and often think you are being followed by the CIA or FBI. You have minor influence over your associates and people resent you for your flaunting of your power. You lack confidence and are generally a coward. Pisces people do terrible things to animals.

ARIES Mar. 21 - Apr. 20

You are the pioneer type and hold most people in contempt. You are quick tempered, impatient and scornful of advice. You are not very nice.

TAURUS Apr. 21 - May 20

You are practical and persistent. You have dogged determination and work like hell. Most people think you are stubborn and bull-headed. You are probably a communist.

GEMINI May 21 - Jun. 21

You are quick and intelligent thinking. People like you because you are bisexual. However, you are inclined to expect too much for too little. This means you are cheap. Geminis are known for committing incest.

CANCER Jun. 22 - Jul. 23

You are sympathetic and understanding to other peoples problems. They think you are a sucker. You are always putting things off. That's why you'll never make anything of yourself. Most dole bludgers are Cancer people.

LEO Jul. 24 - Aug. 23

You consider yourself a born leader. Others think you are pushy. Most Leo people are bullies. You are vain and dislike honest criticism. Your arrogance is disgusting. Leo people are known thieves.

VIRGO Aug. 24 - Sep. 23

You are the logical type and hate disorder. This nit-picking is sickening to your friends. You are cold and unemotional and sometimes fall asleep while making love. Virgos make good bus drivers.

LIBRA Sep. 24 - Oct. 22

You are the artistic type and have a difficult time with reality. If you are a man, you are more than likely queer. Chances for employment and monetary gains are excellent. Most Libra women are good prostitutes.

SCORPIO Oct. 23 - Nov. 22

You are shrewd in business and cannot be trusted. You shall achieve the pinnacle of success because of your total lack of ethics. Most Scorpions are murdered.

SAGITTARIUS Nov. 23 - Dec. 22

You are optimistic and enthusiastic. You have a reckless tendency to rely on luck since you lack talent. The majority of Sagittarians are drunks or dope fiends. People laugh at you a great deal.

CAPRICORN Dec. 23 - Jan. 20

You are conservative and afraid of taking risks. You don't do much of anything and are lazy. There has never been a Capricorn of any importance. Capricorns should avoid standing still too long as they tend to take root and become trees.

"The Aust. computer soc. NEWSLETTER"
August 1979.

WIA NOTES

THE CASE OF THE LOST MEMBERSHIP

Somebody from the Wollongong Area has paid his WIA Subscriptions to Melbourne - but unfortunately he did not include his renewal notice or any other form of identification.

Payment of \$22 was made using a Money Order drawn at the Wollongong Post Office.

If you paid your subscription with a Money Order please contact Geoff Cuthbert at the meeting and I can check your Money Order number against that received in Melbourne.

QSL INFORMATION

"The attention of users of the facilities of the VK2 QSL Bureau is again drawn to the following points:-

1. Cards that contain more than **F I V E** words of a personal nature on the back of the card do not comply with postal regulations and will be returned to the sender.
2. Please show the call sign of the station to whom the card is being sent on the back of the card as well as on the front. This greatly assists in sorting and any cards that are received at the Bureau after March 1st, 1980 that do not comply with this request will be returned to the sender.
3. Any Amateur who feels that there may be come cards at the Bureau for him and he does not have any delivery arrangements already made may check by sending the Bureau one only 9 inch x 4 inch self addressed envelope with a stamp of the current letter rate (at the moment 20 cents) affixed thereto, to the Bureau, will have it returned to him within 7 days with any cards held or advise of no cards or that there are additional cards which would not fit the envelope.

The correct address of the QSL Bureau is:-

Wireless Institute of Australia (NSW Division)
VK2 Q.S.L. Bureau
C/- Hunter Branch
C/- Post Office
TERALBA NSW 2284

The current bureau costs are 2 cents per card either inwards or outwards if the Amateur is not a member of the Institute.

G.B.CUTHBERT VK2ZHU

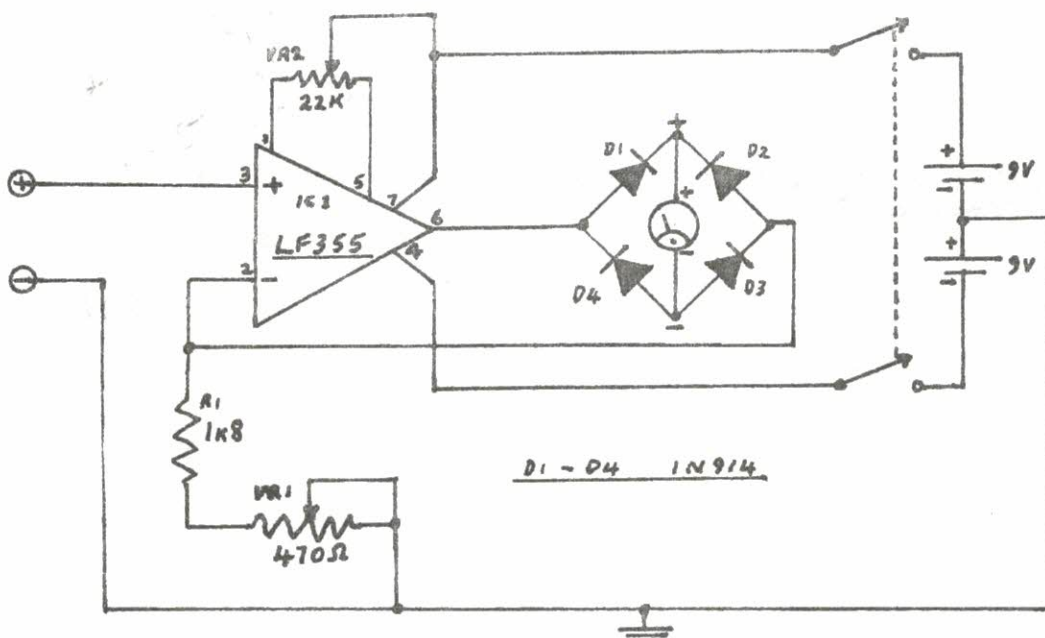
CONGRATULATIONS to Faye and Darrell HAMMAN VK2BLS on the birth of their first child, 8lb 11oz baby boy.
Ed. & the gang.

VOLTAGE TREND METER.

The advantages of a digital multimeter are sufficiently well known that they do not need to be repeated here. However there are situations where it is useful to determine whether the quantity being measured is increasing or decreasing, particularly if it is subject to sudden fluctuations. An Op-amp connected as an AC amplifier is particularly suited to this task. Most simple DVMs contain an LSI chip with an input sensitivity of 200mV and an extremely high input impedance. A suitable op-amp is the LF 355 used as a voltage-current converter, which has an input impedance of 10^{12} OHMS. The circuit shown is designed for an input voltage of 200mV and a current through the meter of 100uA. For other input voltage and/or output currents the trimmer VR1 and R1 should be altered accordingly. The op-amp requires two supply voltages (positive and negative) between 5 and 18V. In view of the nominal current consumption of the circuit (several milliamps), these can easily be provided by two 9 volt batteries.

The calibration procedure is quite straightforward. With the input shorted, VR2 is adjusted for a meter reading of zero volts. A 200mV signal is then fed to the input, and VR1 adjusted for the corresponding reading on the meter. If the meter has a scale of e.g. 0-3/30, then by calibrating the meter to read '2' for a maximum reading (200mV in) on the DVM, an overload of 300mV can be obtained. In the above case, with a constant current of 100uA, the value of R1 should be increased to 2k7. The circuit functions in a similar fashion for both current and resistance measurements. The DVM is simply connected in parallel with the analogue meter.

H. EHRLICH (Germany)



A 20 WATT DUMMY LOAD FOR \$4-00

Brian VK2AXI

You will need -

- | | |
|---|---------------------------|
| 1 x 50 gram coffee tin (75mm diameter, 65mm high) | - \$0-80 (full of coffee) |
| 20 x 1000 ohm 1 watt resistors | - \$2-00 approx. |
| 1 x coaxial socket | - \$1-00 approx. |
| Nuts and bolts to mount socket | - \$0-20 approx. |

\$4-00

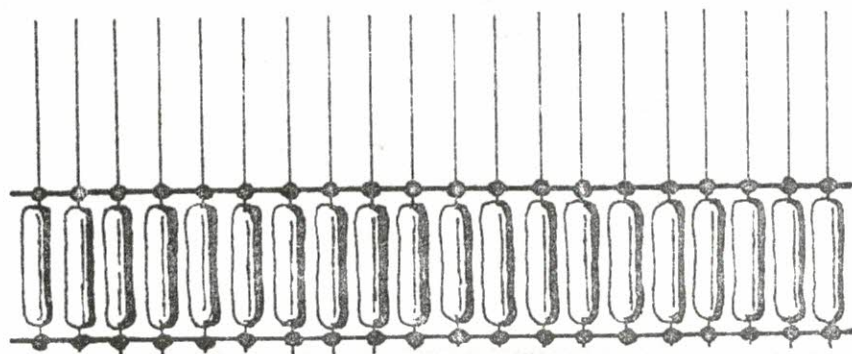
Assembly:

1. Drink the coffee (about 20 cups!)
2. Mount the coaxial socket on the lid of the tin, with about 2 cm of stiff wire soldered to the centre conductor.
3. Lay out the resistors, as shown in the diagram, on two pieces of copper wire about 11 cm long, and solder. Clip the resistor leads off one side only.
4. Bend the 11 cm wires into a circle, and solder the ends together. Stand the circle on the lid, and solder it to the lid in several places.
5. Bend the uncut resistor leads towards the centre of the circle. Solder them to the centre conductor from the socket.
6. Press the lid back into the tin.

Performance:

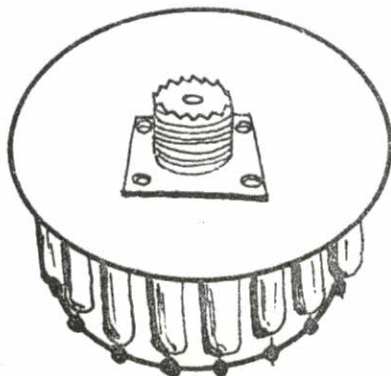
When connected to a 50 ohm line, the dummy load showed an S.W.R. of 1.2:1 at 146 MHz. It can dissipate 20 watts continuously. It has survived levels of around 80 watts for 5 seconds, followed by 55 seconds of cooling off.

It appears to be ideal for use with typical 2 metre FM transmitters with about 10 watts output, and also for novice transmitters (remember that 30 watts PEP is only 15 watts average).

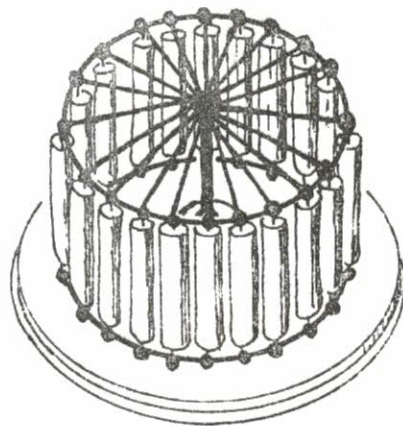


Resistors ready to bend into circle and mount on lid.
(Approximately full size).

Top view of lid



Bottom view of lid



STOLEN RADIO EQUIPMENT

Amateur Radio Equipment stolen from G. Lee-Manwar (VK4AML), 44 Webb Street, Stafford, Brisbane, 4053. Ph. 356 3807 (h); 275 7483 (w)

1. YAESU FT101E transceiver S/N 6K211310
(plus Philips microphone)
2. ICOM IC-701 transceiver S/N 8003943
3. ICOM IC-701 PS power supply S/N 7804238
4. ICOM IC-211 transceiver S/N 6805458
5. ICOM RM-2 Remote Control Unit S/N 02785
6. KEN KP-12 RF Speech processor S/N TK603200
7. PALOMAR 2M50 2 metre linear amplifier no S/N but can be recognised internally by additional receiver preamplifier board and relay mounted inside
8. Power supply, D.C. Regulated 10-20V. D.C., 0-20A built in light grey rack mounting box with heavy aluminium front panel with chromed handles. Fits 19 inch rack. Distinguished by large 0-30V meter and 0-25A metres on front panel and 3 pairs of red and black output socket on bottom of front panel. Two large 6 inch black anodized "Minifin" heatsinks containing 4 - 2N3055 transistors are mounted (insulated) on top of box.

If any of the above items are seen, please inform the nearest police station and ask them to contact the Fortitude Valley CIB (Brisbane).

FOR SALE:-

YAESU Guttermount HF Antenna, including; Base, 2 metre stub, 80m and 40m resonators.\$55.00
JOHN THURSTON VK2DET Ph. 833509

MARCH MADNESS ON PRICES

PRE CATALOGUE SELLOUT! 1 MONTH ONLY!

HI FI SPECIALS METAL DETECTORS

HUGE SAVINGS ON CALCULATORS & CLOCKS

TV GAMES BOOKS & MUCH MUCH MORE



WHAT'S THIS? THE HAM'S DREAM FOR \$1199?? Has Dick finally flipped???

Seems like it. Imagine knocking over \$175.00 off the price of one transceiver! Yes, the incomparable Yaesu FT-901D is being sacrificed at only \$1199.00 - if you want to take advantage of Dick's space problems, here is the best chance you'll have all year! (Cat D-2854)

FT-901D (Cat D-2854)
~~\$1350.00~~
\$1199.00

NOT THE FT-101Z TOO???

Yes! We're slashing almost \$75.00 off the popular FT-101Z. All HF bands, AM/SSB/CW. This is the latest of the famous '101' series. Buy now and save from Dick Smith. Don't put it off - once this stock goes it's TOO LATE! Cat D-2862

FT-101Z (Cat D-2862)
~~\$849.00~~
\$775.00

AND THE FROGS TOO?

Why Not? Save Nearly \$100.00 on the magnificent Yaesu FRG-7000 digital Wadley Loop communications receiver, and over \$75.00 on the world's most popular Wadley Loop receiver: the ubiquitous FRG-7. By the way, don't be fooled into buying a communications receiver without the benefits of the incomparable Wadley Loop circuit. You'll regret it - just as much as you'll regret it if you miss our special prices during our March Madness Sale!

FRG-7000 (Cat D-2848)
~~\$695.00~~
\$599.00

FRG-7 (Cat D-2850)
~~\$395.00~~
\$319.00

WHERE WILL IT END?

Not yet! How about \$100 off the FT-301?

Shock Shock! Horror Horror! The all solid state FT-301 1.6 - 10m masterpiece for only \$795.00?? Has Dick gone stark raving mad? Probably the lack of oxygen up in the clouds. He's practically giving it away! (Cat D-2870)

FT-301 (Cat D-2870)
~~\$895.00~~
\$795.00

HEY! What about the Z-calls?

Not forgotten. How about a magnificent FT-227RB at nearly \$50.00 off? A 2 metre scanning transceiver with the Memorizer circuit to make life simple for you. You too can be the proud owner of a Yaesu 2m transceiver - way under normal price! (Cat D-2891)

FT-227RB (Cat D-2891)
~~\$379.00~~
\$319.00

Or maybe a CPU2500RK is more 'you'!

Especially if you can save money. For March only, you can save \$26.00 on one of these magnificent sets. This is the one they're all talking about. It has a central processing unit (CPU) to give you complete control over the band. A superb set! (Cat D-2889)

CPU2500RK (Cat D-2889)
~~\$575.00~~
\$549.00

IS NOTHING SACRED?

And the other VHF rigs?

You'd better hurry - at last count we had just 4 left of the fabulous new FT-207RA hand-held (Cat D-2888) at \$358.00; and not many more of the popular FT-825R all-mode 6 metre set (Cat D-2886) at only \$795.00

WOOPS! NEARLY FORGOT ONE! The incredibly popular FT-7B HF Mobile:

You can save a cool \$50.00 on this one - if you're quick. We don't have to tell you how good this set is - just listen on air to all the happy owners! (Cat D-2868)

FT-7B (Cat D-2868)
~~\$649.00~~
\$599.00

ACCESSORIES:

Even they're discounted! How about a massive \$70.00 off the FL-2100B 1.2kW linear! That's right FL-2100B (Cat D-2546) Was \$599; NOW ONLY \$529.00.

Or the FC901 antenna tuner (also suits the FT101Z and most other HF rigs!) (Cat D-2855) Reduced from \$289.00 to only \$265.00! Save now!

Or a DC-DC converter for either FT101Z or FT901 (Cat D-2856) Now reduced from \$75.00 to only \$69.00

The 101Z 901 Memory Unit (Cat D-2858) Reduced \$10.00 from \$149.50 to only \$139.50

The FT101Z Fan (Cat D-2865) Down from \$39 to \$29.50!

The YE7A Microphone (Cat D-2865) A budget \$14.50

The FTV-250 transverter (Cat D-2894) Down from \$339 to only \$299.00 - save near \$40.00

Or the YC-500S 500MHz digital frequency meter (Cat D-2892) Reduced to only \$475.00 (save \$24.00!!)

'HAM SANDWICH' SPECIALS

Our warehouse manager has said 'whoa'!!! There's just not enough space left for our new catalogue lines.

Space had to be found - and we've had to SACRIFICE some of our Yaesu prices.

WE LOSE - BUT

YOU GAIN!

WALK INTO YOUR NEAREST DICK SMITH STORE - A

WONDERLAND FOR RADIO HAMs, CBERS., HI FI ENTHUSIASTS, KIT BUILDERS - ALL AT DICK'S MAD PRICES!!!

WHY TAKE CHANCES? BUY YOUR YAESU GEAR FROM THE AUTHORISED AUSTRALIAN YAESU AGENTS!

PLEASE NOTE:

Even at these incredible prices, our Yaesu price guarantee is still valid: If you find an advertisement for Yaesu in a current Australian publication at a lower price than ours, we will guarantee to better it!

To take advantage of this offer, simply bring the advertisement with you to any of our stores in the same city. After checking with the advertiser that they actually have stock to sell at the price shown, our store manager will offer you a better price. If the advertiser is in another city, we will still better his price, but remember the equivalent in freight charges must be accounted for.



These special prices apply to Yaesu gear ONLY for one month. All other items in this mailer will remain on special while current stocks last.



<u>KENWOOD</u>	TL120 - Linear Amplifier 3-30MHZ.....	\$234.00
<u>KENWOOD</u>	TS520S - H.F. Transceiver.....	\$650.00
<u>KENWOOD</u>	TS120V - H.F. Mobile 10 Watt Output.....	\$600.00
<u>KENWOOD</u>	TS120S - H.F. Mobile 100 Watt Output.....	\$730.00
<u>KENWOOD</u>	At200 - Antenna Tuner-SWR.....	\$160.00
<u>KENWOOD</u>	AT120 - Antenna Tuner-SWR.....	\$96.00
<u>KENWOOD</u>	RD300 - Dummy Load 300 Watt to 150 MHZ (1 KW Peak).....	\$79.00
<u>KENWOOD</u>	MC501C - New economy Base Station Microphone.....	\$29.00
* <u>KENWOOD</u>	R1000 - Digital Reciever 200KHZ to 30 MHZ P.L.L.....	\$498.00
* <u>KENWOOD</u>	TR2400 - Digital Hand-Held 2M Transceiver L.C.D. - 10 Memories - Scanning.....	\$342.00
* <u>KENWOOD</u>	Programmable Digital World Time Clock.....	\$95.00
*-----New Products		

We also stock.....

H.F. Antenna's - Ringo Rangers - Morse Keys - Oscilloscopes
- Digital Multimeters -

AND DISTRIBUTORS FOR THE SCALAR RANGE OF ANTENNA'S

180S AND DISTRIBUTORS FOR THE SCALAR RANGE OF ANTENNA'S

180S
With DFE 1240
w/o DFE 1107
P.F.C. 197
p. supply 205
A.Tuner 160
VFO 165
Spk 60

820
1400
Spk 60 same as 180
VFO 196
A.Tuner 160

Linear 1200
3 Triband
200
Vertical 150

291455 \$291944
MACELEC Pty. Ltd.,
99 Kenny Street,
WOLLONGONG. N.S.W. 2500

5116

1240	1240	1830
1290	205	200
	160	150
	165	
	00	
	1530 + Antennas = 2,80	

3160 095116
3570

Moonbounce Report - March 1980.

The overall bandwidth of the radiotelescope receiver is being limited to 2MHz by the temporary rf and mixer unit. It will be replaced with one designed to match the 5MHz bandwidth of the I.F. amplifier.

Information would be appreciated on a source of transistors type MRF904, required for a low noise 30MHz I.F. preamplifier.

Microwave News.

VK2YEV is pressing on with the construction of his 3cm. transceiver.

VK2YCN is temporarily off 3cm while enjoying a trip to England.

There is thus no known other station in NSW to allow 3cm tests to be conducted at present.

There is a lot of megahertz going to waste in VK2 in the amateur bands in the microwave region - what takers?

Lyle VK2ALU.

THE PROPAGATOR

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Amateur Radio Society

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I.A.R.S.,

P.O. Box 1838

WOLLONGONG, NSW 2500
