

MAY 1980

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, 7.30 p.m., at the
Congregational Hall, Coombe Street, Wollongong.

CLUB STATION - VK2AMW

CLUB REPEATERS - VK2RAW Ch 5 (2 metres); VK2RUW Ch 1 (70 cm).

MONTHLY BROADCAST - 7.15 p.m. on the Sunday preceding the meeting night.

Broadcast frequencies are:

Repeater Channel 5 (or simplex channel 40)

Repeater Channel 1 (70 cm)

28.46 MHz USB.

CLUB NETS - 6 metres 8.30 a.m. Sundays - 52.525 MHz FM.

10 metres 8.00 p.m. Sundays - 28.460 MHz USB.

* THIS MONTH'S MEETING -- Monday 12th May, 1980. 7.30 p.m. at the *
* Congregational Hall, Coombe Street Wollongong. *
* * * * *

A 10 metre pedestrian fox hunt will be run, starting from the
meeting hall. Frequency will be 28.350 MHz. So bring all the
10 metre gear you can!
* * * * *

LAST MONTH'S MEETING

The meeting on 14th April was well attended.

Roger Graham, VK2AIV demonstrated his homebrew antenna rotator and
direction readout. The rotator was based on a washing machine gearbox and
windscreen wiper motor supplied at no cost by Terminal Industries Pty
(better known as the TIP). The readout used a multiple position rotary
switch, a circle of LEDs, and diode steering to reduce the number of
connecting wires. A very nice unit.

Station equipment of the late Kaz Skulimowski, VK2NUP, was auctioned
by Denis VK2VDM/YPI, with all the proceeds being returned to Mrs. Skulimowski.

The raffle prize (ARRL Handbook, Bill Orr's "Wire Antennas" and
Dick Smith's "Australian Amateur Radio Handbook") was carried off by
Iyle, VK2ALU.

Blank nametags with dymo tape and writers were available to make
eyeball QSOs easier, and the new coffee (tea) mugs purchased by the club
could well turn out to be the best investment yet.

COMING FIELD DAYS

** Orlay Region Amateur Radio Club Field Day, on Saturday and Sunday of
June holiday weekend, at Fort Macquarie. Write to the club secretary at
P.O. Box 712, Fort Macquarie 2444.

** Southwest Amateur Radio Society Field Day - October 25th and 26th, at
Griffith Showground. Write to the secretary, Griffith Radio Club, P.O.
Box 4, Griffith 2680.

WICEN NEWS - 10VICE SPECIAL

The quietness of the Wollongong group is to be shattered this year. Wicen members should have had plenty of time to recover from our last marathon at Eden. At long last (several years) I have in my hot little hand a copy of the WICEN course handbook. A full training course is to be run VERY soon, before excuses can be mustered.

There will be two courses run, one in the first half of the year and one in the second half. To be on the WICEN list you must have attended one of the training sessions.

The courses are of special interest to those who have mobile facilities to offer, as well as those who would operate fixed station only facilities. Please feel welcome to attend. Time and date to be advised.

Frequencies.

The 2 metre Sydney WICEN frequency is 145.7 MHz. This is a watched channel and should be avoided for normal communications if possible. A WICEN net operates on 3.620 MHz on Thursday nights at 2130K (9.30 p.m.).

Operations.

WICEN has not been activated during the past 12 months in this area. However we have been on standby via the State Emergency Services.

Exercises.

These are at present being planned with the State Emergency Services. There will also be a statewide exercise to involve all WICEN operators. A local - and I do stress local - (that's a WICEN in joke, after Eden) exercise to be held during first half of the year will simulate welfare traffic after a major geological excursion.

Illawarra WICEN includes the far South Coast and Mittagong areas. These are capably looked after by Vic VK2VL and Parry VK2ZAG respectively. The Mittagong group recently held a very successful exercise.

Questions.

Do you have to have a licence to join WICEN? - NO. All sorts of people are utilized during an exercise or an operation, including the all-important people who keep the tea and coffee flowing.

- Jim Fotts, VK2BEG.

ROADROLLER IN DISTRESS STARTS A SCAPE AT SEA

As the storm which ravaged the south blew itself out last night a full-scale air-sea rescue operation was ordered in the Bristol Channel for the survivors of an air crash. All shipping was warned to look out. Coastguards watched. Lifeboat crews stood by. A Shackleton crew at R.A.F. St Mawgan, Cornwall, prepared to take off as soon as the weather cleared.

But the alarm was called off - when police traced the distress call to a road roller on the M5 between Almondsbury and Cribbs Causeway, six miles north of Bristol. The driver, unable to work in the storm, had signalled to his mates two miles up the road:

"Mayday. Weather terrible. Am ditching for tonight."

The international distress signal was picked up by radio ham Mr. Ray Smith of Patchway, Bristol. He rang the police, the police rang the airports... A spokesman for Gloucestershire police said last night:

"The driver who sent the message is an ex-R.A.F. radio operator."

- "Daily Mail"

DEFINITIONS:

Sweep Generator: essential machine in a broom factory.

Plate tuning control: dial for a musical meal.

Feedline: queue outside a cafeteria.

COMPUTER USERS GROUP: Letter to the Editor.

Dear Sir,

I would like to advise your readers that there is now a "Wollongong Computer Club/Users Group".

As can be seen from magazines such as "73", Computers and Amateur Radio go side by side.

We have two amateur radio members at the moment. One has written a Morse transmit and receive program for the 650 CPU which would be of interest to some of your members.

We require the following: Members -

- (1) who have a computer
- (2) are building a computer
- (3) are thinking of building or buying a computer
- (4) who can't afford a computer
- (5) who have good ideas to put a computer to use - e.g. teletype, logs, etc.

To date we have the following computers:

- 3 TRS 80 level II, one with disc.
- 2 Ohio Scientific.
- 1 Dream 6800.
- 1 Euro Card (Bob Armstrong) 2650.
- 2 Ordinary 2650.
- 1 Sorcerer.

We have software to exchange for all of the above.

We have members writing in Machine language, Basic, and Micro Basic.

Some of your members may not be sure which computer will suit them, so now is their chance to play with ours, find out what they do, and then buy the one that suits them.

We have members that have no computers - just a common interest. As we have been around for only about 12 months we have no fees - just fun.

Any of the following can be contacted for more information and details of meeting times, etc. -

Paul Janson, Datto, 615451
Garry Nelson, Parkborough Heights, 714054
Graeme Jackson, Wollongong, 295876.

Thanking you,
Paul Janson.

SPECIAL RAFFLE

It has been decided to raffle a Penwood SW-220 Station Monitor, ex W2NUP, which is in mint condition and working perfectly. 160 tickets only will be sold, at \$2 per ticket or 6 tickets for \$10. Tickets will be on sale at the next meeting. A worthwhile piece of gear, so dig deep and bring your money with you.

NEWS AND PIECES...

- For the June meeting, it is hoped to have slow-scan television gear demonstrated.
- On Wednesday 23rd April Giv Donk W2VPD and Duncan Laidler W2YKP started their first CW class at Warilla High, and also made their first 2-metre contact with Sydney from the school radio club.
- Propagator Printing Problems... with the previous printer no longer available, any information members may have about an affordable printer would be very welcome.
- The committee is considering the acquisition of permanent clubrooms for the society. Again, any information about possible premises would be welcome.
- Plans are afoot to resite the Channel 5 repeater. The proposed location gives improved coverage in Wollongong, with hopefully little reduction in more distant areas. Further testing of the site is proposed soon.

RECEIVER NOISE, MAY 1980:

The new very low noise receiving preamplifier has been built, and is being adjusted for lowest noise figure.

As it is not prudent to use a gas tube noise generator as noise input to a JFET type preamplifier, a noise factor comparator is being made up with assistance from W2ZHU who produced the printed circuit board.

- Iqbal W2ZHU.



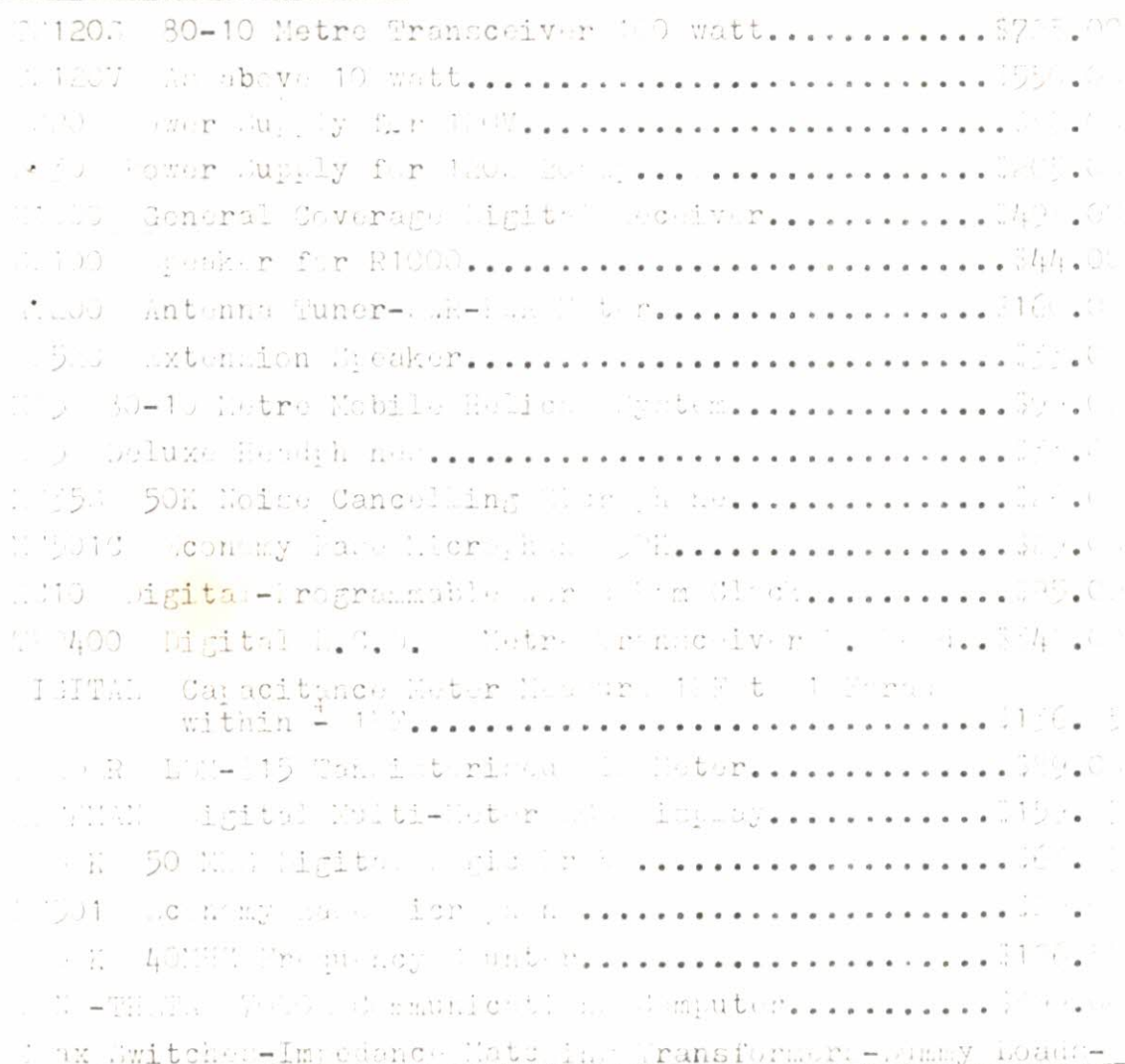
99 Kenny Street (P.O. Box 137)

Wollongong 2500

Ph. 10.421 29 1455

PROFESSIONAL & INDUSTRIAL ELECTRONICS

AMATEUR RADIO PRICE LIST



LEADER TEST INSTRUMENTS

ICOM



DAIWA

Model LM1430 H.F. Power Meter - Army order	
1.5-500 MHz 120 watt.....	\$149.
T.E. Dip Meter 1.5 - 150 Mc.....	\$299.
Automatic Antenna Tuner.....	\$169.
167500R Rotator with 2 r.f. line meters in Australia	

Stock of live range of
refuge. For significant, the
water in water is listed here.

DC TO DC CONVERTER FOR THE TS520S

To operate the TS520S from 12V DC, you can spend about \$70 on an optional commercial converter, or about \$5 on a homebrew version!

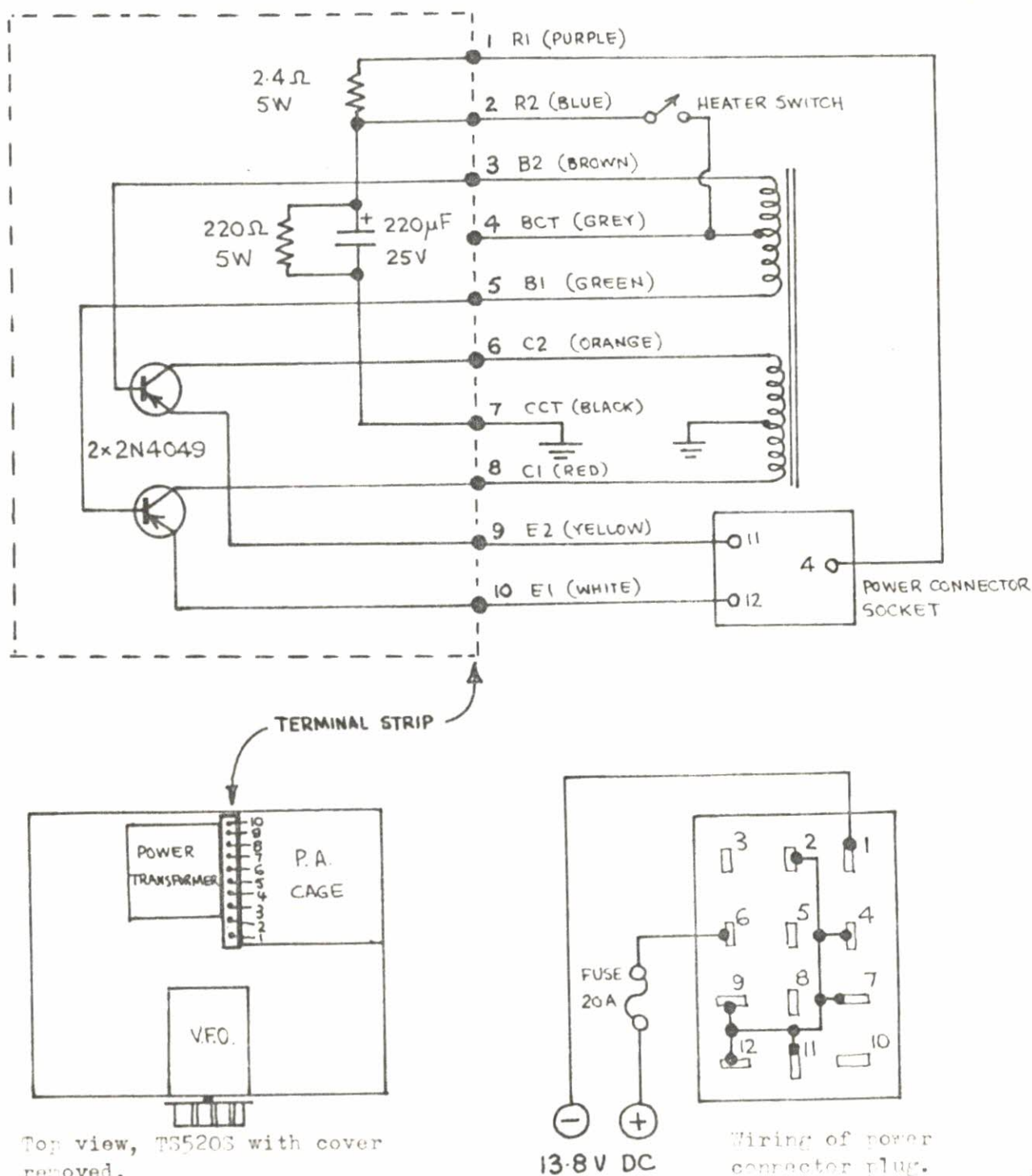
1. Make up the chopper circuit shown in the dotted box. Only a modest heat-sink is needed for the transistors.
2. Take the top cover off the TS520S and find the terminal strip between the power transformer and PA cage (see diagram). Run wires from the chopper to the terminal strip.
3. Wire up a power connector plug as shown.
4. Fire up on 12 volts DC!

Note on transistors:

The specified transistors (2N4049) have hefty ratings and a price to match: PNP; germanium; V_{cb} 60V; V_{ce} 45V; V_{eb} 30V; I_c 60A; P_{tot} 170W; and price about \$25 each.

However, Ian VF2DKS reports that he has operated at novice power levels using a pair of 2N277 transistors: PNP; Germanium; V_{cb} 40V; V_{ce} 25V; V_{eb} 20V; I_c 15A; P_{tot} 150W.

Best of all, the 2N277's can presently be obtained, on heatsinks, from the club store and other sources, for a few dollars.



A QUOTABLE QUOTE

"There are some simple rules for promoting club growth which I can pass onsuch as making sure that your club meetings are fun to attend. That may sound too simple an idea, but unfortunately, I have been to far too many club meetings which were anything but fun. Long battles over buying paint to spruce up the club room will not bring back the membership to the next meeting.

Let me provide some basic rules for getting clubs to grow. I mentioned that meetings should be funthat means that the business end of the meeting should be kept mercifully short. The business aspect of a club should be handled almost 100% by the executive of the club, with merely brief reports to the membership. There is a tendency on the part of some nitpickers to try to get long bitter battles going over obscure matters; somehow the whole club joins in and the meeting goes on endlessly with everyone deeply involved in the discussion. It seems that this amount of participation and interest must be good for the club.....NOT TRUE. The fact is that many of the battlers will find something more enjoyable to do instead of the next meeting..... like watching television.

Think of the club meetings as show biz. Look for some interesting people to bring in and talk to the group. If you have any Ham manufacturers in the area, draw on them. Arrange shows of RTTY, SSTV and any other new or unusual developments. Microcomputers are also a big draw. Get some of your experts to talk about DXing, satellite communications.....maybe a short QSL show and tell during each meeting for the DX gang to brag about their accomplishments. New equipment is always of interest. If someone has built a piece of gear, have a show-and-tell about it.

Club projects are a plus. Novice and higher class licence classes will only help the club to grow. If you don't have at least 50% youngsters in your club then you may find that it is in the hands of some old-timers who are keeping out the youngsters and newcomers."

WAYNE GREEN W2NSD 73 Jan., 1980

If you have any comments on the above there is a list of committee members on the front page of the PROPAGATOR. It's your club, need I say any more.

DENIS VK2VDM/YPI

Jim W2VPS worked Tom ZELAN (Rhodesia) on 28.53 MHz from 5.45 to 6.00 p.m. local time on 4th March, using a converted CB set with 12 watts into a quarter wave vertical at 30 feet. A good contact into a country no longer on the map! Jim also seems to have the ideal random wire antenna - S.W.R. is less than 3:1 on all bands - without an antenna tuner - and it gets out all right.

NEW CALLS

KARPOV v's THE WORLD

Every second sunday a new move by the World Champion is announced, listeners then consider their move and reply by mail. The most popular move selected by listeners is then taken as the move for 'the World' and played against Karpov.

8
7
6
5
4
3
2
1

a b c d e f g h

- (0-0 = king side
castling)

The complete game is played through at the beginning of each broadcast to give you the latest position. Listeners may send in moves at any stage through the game. The next moves will be announced on the 4th and 18th of May at 8.30 pm local time. I listen on the following approximate frequencies - 15130 kHz & 17840 kHz. Moves are addressed to - 'Karpov v's The World', Radio Moscow World Service, Moscow, USSR.

- George SWL



NOVICE SECTION

ZENER VOLTAGE CHECKER

Gio Donk VK2VPD 22-2-'86

Have you ever needed a zener diode of a certain value and not been able to read the numbers on your diodes in your spare-parts box? Or if you could read the number, you could not find it in your reference book? Or knew what voltage your zener was supposed to be but when put into the circuit it did not meet up to specs? Well I have, and I could not find a simple circuit for a zener tester either. So I designed my own. You will need:

1 SPST switch; 2 9V batteries; 1 2M linear pot; 1 2K2 resistor
1 Strepsils tin (or any small container); 2 alligator clips (red and black); some covered wire; and a small amount of tin for making battery holder which is to be soldered into the bottom of the tin.

The current limiting resistor was picked as 2K2 ohms because larger values seemed to drop the voltage too much, and smaller values blew up too many diodes (2.2k is just right). The two 9 volt batteries hooked up in series allows any zener up to 16 volts to be tested (the range between 16-18 V is not very reliable).

The pot should be set for 0V every time a new zener is tested, then wound up until meter no longer rises. The pot acts as a voltage divider and prevents the diode from being overtaxed with too great a voltage.

