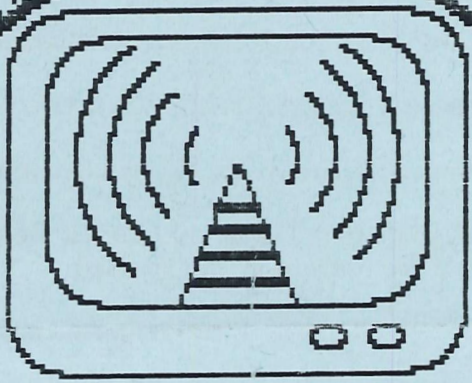
GATEWAY



GGREC

THE OFFICIAL JOURNAL OF THE GIPPSLAND GATE RADIO AND ELECTRONICS CLUB

NOV/DEC 1987

GIPPSLAND GATE RADIO AND ELECTRONICS CLUB

COMMITTEE MEMBERS 1987/88

President.....Kerry Clayton VK3KFC *

Secretary.....Ian Buczak VK3KGB

Treasurer.....Albert Hubbard VK3BQO

Member.....Dave Campbell VK3XMF

Member.....Peter Vat VK3KCW *

*NOTE: Both Kerry Clayton and Peter Vat are available to fulfill the functions of Club President.

Club Component Officer & Test Equipment Library:
Albert VK3BQO

Magazine Editorial:
Ian Jackson VK3BUF (contact on 7897339)

Club meetings held at the 1st Oakwood Park scout hall in Heyington Crescent, Noble Park North. Meetings commence on the Third Friday of each month at 8:00 pm.

Club Station: VK3BJA Located at the scout hall.

Postal address: P.O.Box 98 Dandenong 3175

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ALL VISITORS WELCOME
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PRESIDENTS REPORT

I have several items to talk about this time of year, the Christmas party, social nights, 6 metre repeater and the Australia day weekend.

First of all is the Christmas party. It is to be held on Dec. 12 at John Hemmings Memorial Park, Dandenong. (Melway map ref 90 C6) So keep the date clear and try to attend. Its BYO everything, gifts and/or prizes to be presented.

The last social night on the 6th of this month was held at the Baxter Tavern, eleven turned up and all enjoyed it. (Except for the band..ed.)

Has anyone got ideas of how to design a good raft consisting of a heap of rubber inner-tubes? Anyone a relation of Ben Lexon? A group of Club members going to Corowa for the 'Bicentenial celebrations' are <u>now in training</u>. Ask BQO and KFC about the Melbourne Cup day!

The six metre repeater committee is looking at a range of antenna designs for the repeater project. If you have thoughts on good 6M antenna design they would be pleased to hear from you.

A car number plate seen around recently read: BE ME UP. Quite good I thought, anyone seen a better one?

11-12/87

Those members who borrowed Club test equipment must bring it back to the next meeting (20-10-87). Any equipment borrowed after this meeting must be returned to the equipment officer (Albert, VK3BQO) after a reasonable loan time but not an indefinite period. ie. over the holidays.

For those who don't know, our Club test equipment is:

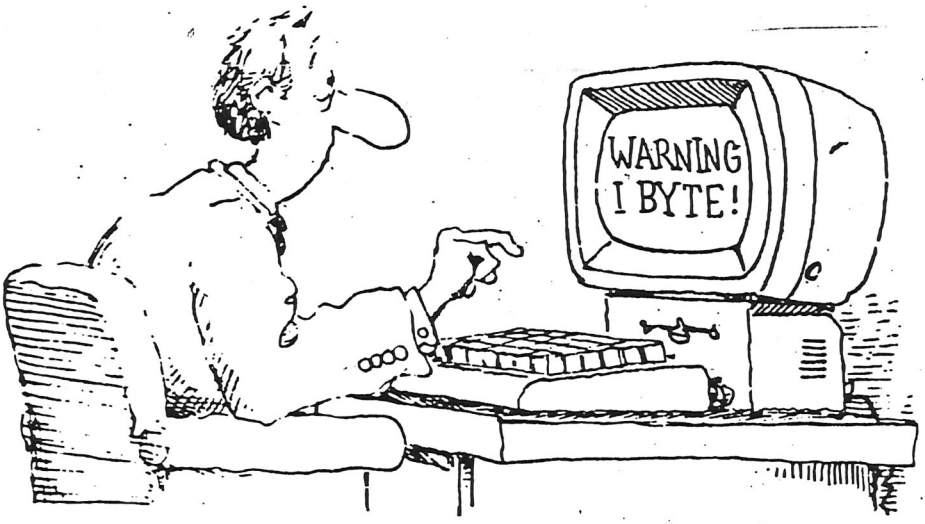
1. Digital capacitance meter.

2. Antenna noise bridge. (100 MHz max.)

3. Digital freq. counter. (500 MHz max.)

Kerry Clayton, VK3KFC

GGREC President



THIS FRIDAY NIGHT.....

At the meeting there will be a computer applications display. There will be a range of computer systems and their accessories.

If you have equipment of your own, bring it too!

2 METER J-POLE ANTENNA -

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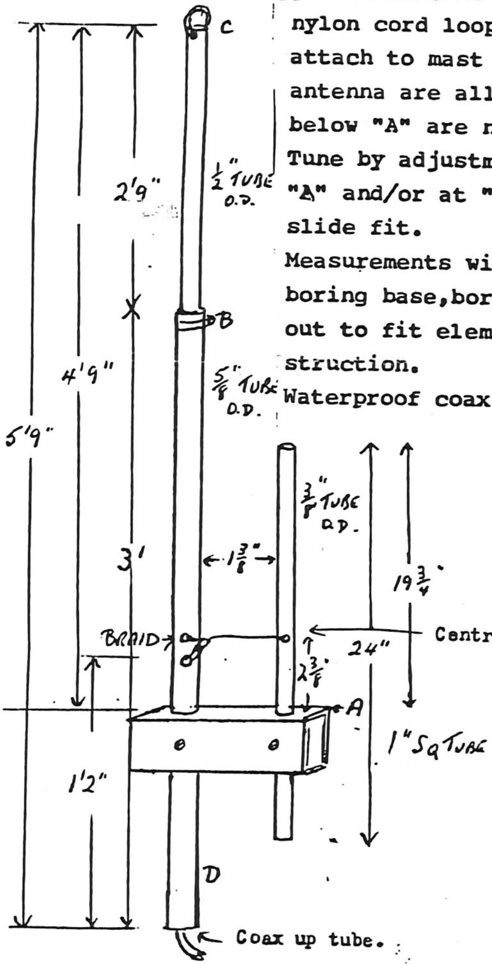
Here is an easy to build 2 meter antenna of many uses.
Materials: Aluminium Tube 4'X ½" , 3' X 5/8" , 2' X 3/8".
3" square tube 1" . 2 self tapper screws . 1 hose clamp .
52 Ohm cable length to suit.
Bore hole in 5/8" tube 14" from bottom for coax to come through. Bore base to suit element size with tight fit. Fix with self tapper screws. Use clamp on joint "B". Make nylon cord loop at "C" for hanging , or attach to mast at "D". Active parts of antenna are all above "A" so dimensions below "A" are not critical.
Tune by adjustment of element lengths at "A" and/or at "B". Elements at "B" should slide fit.
Measurements will vary with tuning. When boring base, bore hole smaller and file out to fit element tightly for rigid construction.
Waterproof coax with silastic.



"...dont expect any chirp now"

"QUACK-OFF, RUBBER-DUCKY!"

If I had a dollar for every time that I've heard someone say "anything would get out better than this rubber-ducky on 2 metres", I'd be able to afford a 2 metre hand-held myself.

Well, since I'll never see those dollars, here's how to build a better antenna, cheaply.

Shopping List:

A couple of metres of RG58.
An antenna plug for your transceiver.
1.2 metres of 5 cm pvc tubing (not grey!).
Caulking compound.
A curtain ring.
Knife, tape-measure (a good one), soldering iron and solder.
VSWR bridge (or noise bridge) and patch cord.

Steps:

1) Cut around the outer insulation of the coax 49 cm (19½") from one end (be careful not to nick the braid) and remove that piece of outer insulation.

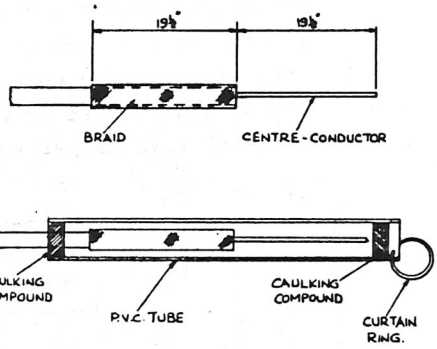
2) Fold back the exposed braid over the wax, as per illustration (i). This is easier to do if you bunch up the braid first to make it loose.

3) Solder the antenna plug onto the other end of the coax.

4) Place the VSWR bridge or noise bridge in line. Bring the antenna to resonance by equally shortening the centre conductor and the braid. There is no need to cut the braid, just bunch it up a little.

5) Place the end of the antenna into the PVC tubing as per illustration (ii).

6) Caulk both ends of the tubing and allow to dry.



7) Drill a hole in the tube and insert the curtain ring, as I illustration (ii).

8) Hang up the antenna wherever you please. For those masochists among us who will use a hand-held in a vehicle, try hanging the antenna from your car's coat-hook, and become full-quieting into VK3REC.

So there you are, no longer using a shortened and horribly inefficient quarter-wave antenna, but a full-sized dipole, perfectly matched to the transmission line.

But why stop with just one antenna? Suspended from a tree, the 10 m. version of this antenna makes a beaut low-angle radiator. Use the following formula to obtain antenna length (centre-conductor and braid) for all bands -

$$\frac{142.650 \text{ metres}}{f \text{ (MHz)}} \qquad \frac{468 \text{ feet}}{f \text{ (MHz)}}$$

Now, if only I had a tower high enough to suspend one for 160 metres. No more earth-stakes, no more radials. Roll on Tattslotto!


MERRY
CHRISTMAS