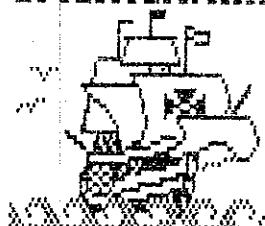




# THE PROPAGATOR



## ILLAWARRA AMATEUR RADIO SOC. INC.

MONTHLY NEWSLETTER OF THE ILLAWARRA AMATEUR RADIO SOC. INC.  
 VOLUME - 88 , NUMBER : 1. FEBRUARY 1988  
 REGISTERED BY AUSTRALIA POST PUBLICATION NUMBER : NBH - 1491.

MEETINGS ARE HELD ON THE SECOND TUESDAY OF EACH MONTH ,  
 (EXCEPT JANUARY) AT 7.30.PM. AT THE STATE EMERGENCY SERVICES ,  
 BUILDING , IN MONTAGUE STREET , NORTH WOLLONGONG .

VISITORS ARE MOST WELCOME TO ATTEND THE MEETING'S .

### CHRISTMAS PARTY

The Illawarra Amateur Radio Club held its Christmas party outing for 1987 at Cordeaux Dam last December.

There was a good roll up for the occasion with plenty of XYL's and their offsprings . Also the man from outer space the DARTH VADER was there with his electronic voice, with some of the children not to sure what to make of him ,but was well taken on the photo's. Santa also arrived during the day and was immediately surrounded by the

children who were eager to see what Santa had in his sack for them.

There were lots of happy smiling faces everywhere as Santa gave them toys. There was one sad if not Red face on the day.

This was when Santa had a slight mishap (yes even Santa makes boo boo's sometimes), poor old Santa's belt slipped down from his waist in

the middle of a couple of HO HO HO's, and dropped down around his ankles. With a quick swoop and a couple of HO HO HO's Santa's belt was back where it belonged and he was on his way again as if nothing had happend.

Well done Santa, you put a twinkle into a few childrens eyes on the day. A very nice day was had by all who were there and one can only feel sorry for those who didn't make the effort to attend , and in doing so missed out on a glorious get together.

### ONE OFF THE BIG ONE

#### DECEMBER

#### COMMITTEE

#### MEETING

General discussion took place on future club activities and it was decided to hold another committee meeting on the 2/2/88 a week before the general meeting as well as the normal meeting the week after the general meeting.

In one of the December draws our FRL-3 SYNDICATE came up with FIVE numbers DIVISION-2 and a dividend of around about \$500. This will pay a share to financial FRL-3 members of around \$17 , and will be sorted out later as the ticket was in Dave VK2VAV's name , and Dave is in Outer Mongolia at the moment ( we hope he will be coming back) hi hi.

Other smaller dividends have come up in this series , which shows that as well as being a good fund raiser the FRL could be a real winner to members who participate in this event.

So remember HELP the club and maybe make your fortune,,,,,

----- BE IN IT -----  
 The new FRL-4 will be available at the February meeting..

# "Kitchen Table Technology"

REV. G. C. DOBBS, G3RJV

## "Tinned VMOS" — A Simple Transmitter for 80 Metres

IN the "golden days" of amateur radio, the average amateur could look into his junk box, or Charlie McGee's Closet as our Australian friends would have it, and find all the bits and pieces he required to build his new transmitter. Sadly things are not quite the same these days. There are very few surplus items of equipment which can be used directly to cull parts for radio building. H.M. Government does not seem to shower the surplus market with almost-usable items of communication equipment. This is not to say that radio construction is now more expensive; on the contrary it is probably cheaper. If the avid constructor keeps his weather eye open for bargains in components, then by buying at the right time and hoarding, construction can be a very inexpensive hobby. Avoid the prestige mail order companies and be prepared to amend circuits to suit the available components and amateur radio construction is as cheap as it ever has been.

One day when musing on the state of the world and why no one comes to Evensong any more, a little lateral thinking came my

way. I had recently looked at a VMOS transmitter circuit driven by a CMOS integrated circuit driver arrangement and recalled that lurking in my "built it but never really got around to using it box", my Tuir Box as our American friends would call it, was a little TTL oscillator board. It was a crystal oscillator for 80 metres once suggested by G3VA from, of all things, a Norwegian scouting book, although I had seen the circuit some years before in a copy of QST from K6UH. I had intended to use it to drive a TTL IC power amplifier stage found in an Italian QRP magazine.

I take the reader on this trip down my circuit memory lane to illustrate that not only components, but circuits, should be hoarded. I photocopy circuits which I find, and might need later, and consign them to my incomprehensible filing system: a lot of old folders, most of which have no markings on them or are marked "Anthems For Advent" or "Sermons 1969 to 71". The little TTL oscillator and buffer circuit, I thought, could well be used to drive one of my VN10KM devices. A simple 'bolt together' circuit job. Add the TTL oscillator and driver to a standard VMOS power amplifier circuit and see what happens.

### The Circuit

The circuit, such as it is, of the transmitter is shown in Fig. 1. The integrated circuit is the very inexpensive — they almost give them away — SN7400, quadruple 2-input positive NAND gate. I didn't pay anything for my stock of 7400's. A well known fruit machine manufacturer was overtaken by technology about ten years ago and had to scrap most of their rather complex and beautifully made TTL counting circuits for electronic gaming

CONTINUED NEXT PAGE

## LINKING PACKET IN ZL.

Linking packet bbs to non packet users. An exercise in information interchange in the Hawke's Bay area of New Zealand.

There are some of our "HAM" mates out there who cannot for various reasons access a packet network.

Prior to the arrival of packet into ZL, the major information interchange was via RTTY selcal systems. These have come and gone and now only ZL1AMW's service at the bottom of the 80M band really survives.

And provides a great service as well. We in packet are somewhat spoilt in the way that the data is error corrected and perfect ??? copy is received all the time.

Whereas, RTTY and ASCII suffer from all sorts of corruptions. As a service to the area I have extended coverage to local terminals to get "MAIL" into the packet system. It all happens with "METAL MICKEY" our very polite speaking 70cm repeater.

Briefly, by touch tone control, metal micky provides the following features.

SPOKEN: HELP instruction to change freq to rtty or ascii mailbox. Morse practise and a request for what speed. Local and UTC time and date. Bulletin date. Propagation alert, frequency and direction. Repeater scan. Store

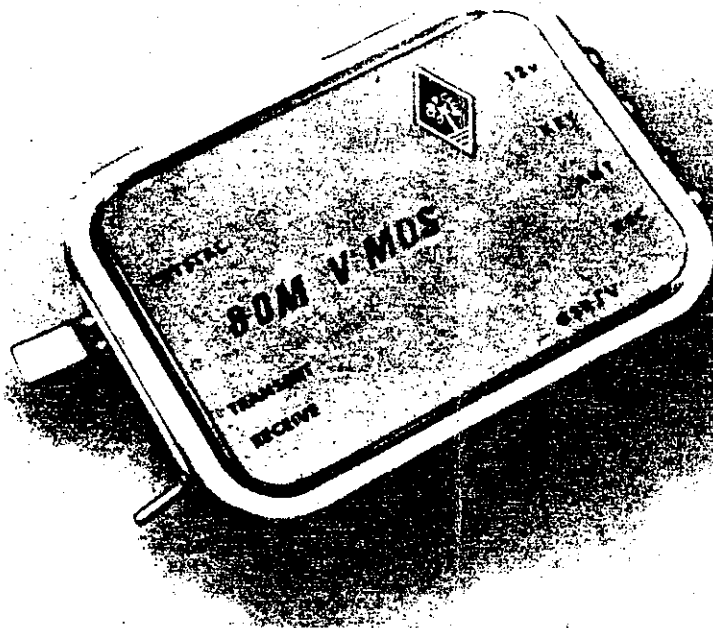
ascii and forward rtty or vice versa.

PHYSICAL: Link various local and distant repeaters to the 70cm repeater. Change transmission to 144.90Mhz for all data traffic.

Reset packet repeater. Engineering control of all software and vitals from ground station. So with assistance from METAL MICKY and the guy who looks after him, "HAMS" here can put there messages in his innards and us fortunate packeteers will regurgitate it and put it into this system.

Hope that gives you the xray on whats alive here in napier. Its all go go go this information business.

DAVE SYSOP, ZL2AMD.  
Taken from the BBS VK2XY



Tinned VMOS: top view of the 80-metre transmitter.

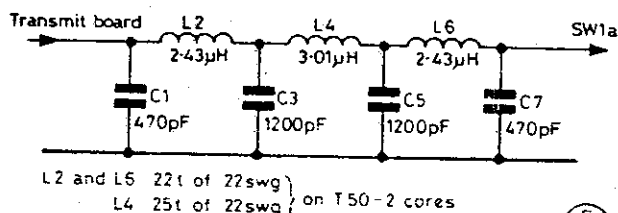


Fig 2 LOW PASS FILTER

machines when dedicated integrated circuits appeared for their application. But you cannot get integrated circuits off soldered boards, you say? Well generally that is true but a group of us who got these boards just applied a blow torch to the solder side and banged the board against a table to knock out the ICs. I did not expect any of them to survive but I have yet to find one from that operation that does not function.

The circuit amounts to a flip flop oscillator using two gates, IC1(a) and IC1(b) coupled by the crystal (X1) to determine frequency. The resistors help to ensure that the gates operate in an almost linear fashion for starting and help with temperature

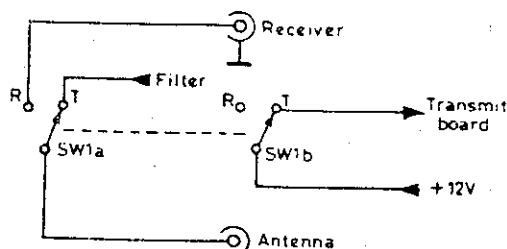


Fig 3 SWITCHING

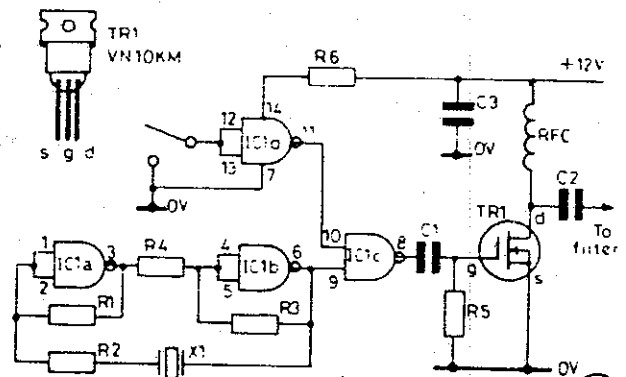


Fig 1 VMOS TRANSMITTER

R6 = 470Ω

#### Table of Values Figs. 1 and 3

R1 = 560R

R2, R4 = 220R

R3 = 1K8

R5 = 1M

C1, C2 = 10nF miniature  
mica

C3 = 0.1µ

RFC = 14 turns of 36 swg

enamelled wire on ferrite bead

IC1 = SN7400

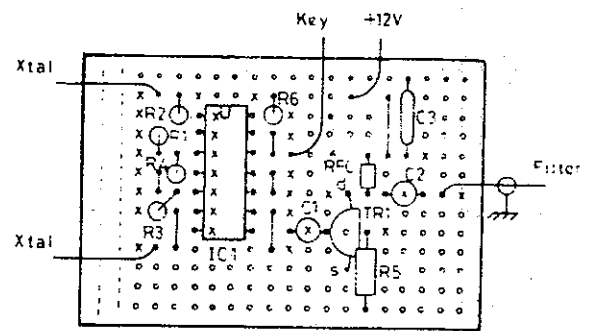
TR1 = VN10KM

SW1 = double-pole changeover  
miniature toggle switch

X1 = fundamental 3.5 MHz band  
crystal

stabilization. R6 ensures that the IC has something near its correct operating voltage, usually 5 volts for TTL devices. IC1(c) acts as a buffer-driver stage but since it requires both gates to have input to function, it is also the stage which is keyed. The keying is done using the fourth gate, IC1(d), which functions as a simple on/off switch from the Morse key. The more sophisticated constructor could add some keying shaping to this part of the circuit.

The driver feeds into the single VN10KM VMOS PA stage. Delightful stuff this VMOS, so they tell me. Not only is it a high input impedance but on paper they seem almost indestructible. There is no thermal runaway as with bipolar transistors, they have excellent immunity to damage from high SWR in both open circuit and short circuit conditions, they are self-ballasting when used in parallel so two, or more, of them can be stacked piggyback fashion and they find their own current levels. The PA circuit in Fig. 1 is simplicity itself and delivered up to 1 watt of RF output, enough for useful QSOs on the band.



— Copper strips x Break in copper ----- Underside join

Fig 4 TRANSMITTER BOARD

The output from the PA stage requires a good low pass filter. Bearing in mind that the TTL circuitry will produce a square wave signal which is rich in harmonics a single pi-network section is not adequate, even at these low power levels. The low pass filter employed is shown in Fig. 2.

The transmitter was to be a simple construction exercise so manual transmit/receive change over is used. This is illustrated in Fig. 3. A single miniature 2-pole changeover toggle switch is employed to change over the antenna from transmit to receive and also cut off the oscillator during the receive periods. It would, of course, be possible to build a semi-automatic changeover using

CONTINUED PAGE 10

# ANNUAL GENERAL MEETING & B.B.Q.

\*\*\*\*\*

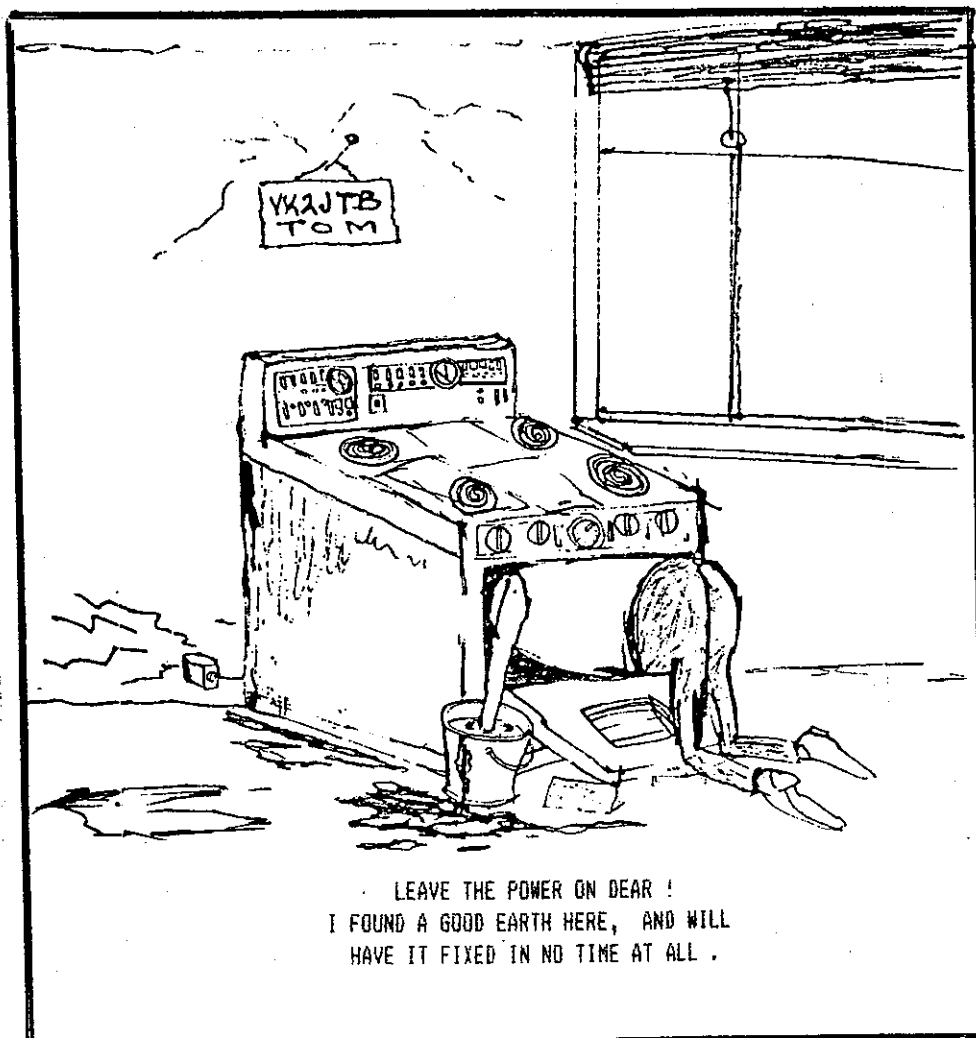
The Mid South Coast Amateur Radio Club will be holding its Annual General meeting on the 20th February 1988.

The meeting will take place at 10.30 am. and will be held at Hancock Ranch, little forest road Milton.

A cordial invitation is extended to all members and wives of the Illawarra Amateur Radio Society (inc) by the Mid South Coast Amateur Radio Club secretary VK2CDF Dave.

Anyone who in the past has attended one of their annual general meetings will tell you that you are made most welcome and have an enjoyable day.

Bring your own meat and refreshments for the day as B.B.Q. facilities are available.



LEAVE THE POWER ON DEAR !  
I FOUND A GOOD EARTH HERE, AND WILL  
HAVE IT FIXED IN NO TIME AT ALL .

## SHORT PULLER AT LARGE

Are you a " RUN OF THE MILL " type like me, who believes that in this democratic society that you are safe going into a newsagency to get the daily paper ?

If you are then think again, for amongst us is a new craze that has hit newsagency shops recently.

The craze has become known as the " SHORTS PULLER ". What happens is that you go into a newsagency to get a paper or a packet of those dreaded fags, when suddenly this person comes in and if you are wearing shorts tries to pull them down a little bit from your midriff.

Hard to believe isn't it, but to make it more hard to believe is the fact that the person who does this is not only a citizen of high standing in the community but he is also a fellow club member.

Recently the "SHORT PULLER" was pulled up short when he found out the person wearing shorts wasn't a buddy of his but a complete stranger.

As Santa would say "HO HO HO" .....

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MON-FRI : 7.30 PM. - 9.30 PM.  
SAT-SUN: 9.30 AM. - 9.00 PM.

**STOP PRESS  
VK2RAW FIXED**

Graeme ,VK2CAG replaced all the mosfets & sensitivity came up to normal.....

Also did the mod to the OSC. & IF & fitted the 10.7MHz filter..... It came up OK & bandwidth is now 60db down at +/-15kHz. (was previously 60db down at +15/-30kHz)....

The main reason for the re-build was to eliminate rprr down time which would be necessary to modify existing RX. Down time was now necessary, so the reputation of VK2RAW is shot anyway.

So he had a sort thru 'old' xtals & came up with an old 'anti channel 5'xtal that he used in his mobile...

It mixes 146.250 down to 10.7MHz and so enable the use of a standard 10.7MHz filter.

The re-build will still take place eventually, but the pressure will be off and give us time to do a proper job on the new one.

Many thanks to the many who helped in getting VK2RAW back on air in such a short time.

From your:  
REPEATER-CHAIRMAN

VK2XGJ - John.

\*\*There's one advantage to the music the younger generation goes for today - nobody can whistle it.

\*\*A woman never admits she has lost an argument. She just thinks she has failed to make her position clear.

# LOCAL AMATEUR DOES TIME

This is the story of an Amateur we all know & love, and how his life was changed one fateful night on an Amateur repeater.

For fear of reprisal, the writer will remain anonymous, as will the story's subject. The story could have been told to you in one short paragraph, but the writer felt clarity of the incident & to really "put the boot in", the paragraph could be padded out just a bit.

It was also to help the Propagator editors to fill between the covers. Besides, it's raining today & I'm bored.

Now this Ham friend of ours had been a Novice for quite a while but recently had sat & successfully passed his Limited Licence.

He was very excited & happy about it & there was much rejoicing in his household. The caring friend that he is, he wanted to share his happiness with his fellow Amateurs, so within hours of receiving that precious piece of paper, he was up & running on his local 2mx repeater.

Within the matter of only a few quick contacts his moment of reckoning would be upon him, and to this day yours truly will not let him forget it. This is the truly factual account of what happened.

You see, our friend of ours had previously only been used to the HF Bands, where he could push down the lock bar on

his desk microphone & have a really good chin-wag. (No sore fingers or thumbs from the mike button, but maybe a few sore ears at the RXing end!) Anyway, here he was with his 2mx rig up & running on the 7275 repeater, exercising his jaw muscles to the fullest with an unfortunate lost sheep that had accidentally strayed on to the repeater frequency. (The writer was one of these lost sheep).

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Our subject was blissfully enjoying the new found freedom that VHF FM provides over the HF bands. That is no QSB, QRN or QRM, (although I'm not so sure about that last one). BUT, the horizon was growing dark & in his blissfull inebriation, our friend's overs were growing longer & longer in length.

No one, (including me) had thought to mention to our friend those two words that strike immense fear & trepidation into the hearts & souls of even the most courageous & strong willed of 2mx & 70cm operators. Those two words I will attempt to type now with my own very shaky & unsteady hands.

(I warn those with a weak stomach to look away from this page now).

The two words I speak of are --- "TIME - OUT". Yes dear readers (those that are still with me & have not run to the nearest bathroom with their cheeks full) those two words were TIME-OUT.

(Who amongst us have not received scorn & ridicule from those people, whom we thought were our friends, when we have accidentally gone over the TIME-OUT period by a matter of a few seconds, maybe minutes).

Now back to our story, as I had said no one had bothered to mention or remind our friend of the repeaters TIME-OUT. (Perhaps it was an unconscious & sadistic thought on our part that he to would succumb to the pleasures of a long over & he too would join the ranks of the damned.)

When we left our friend last, he was in bliss. To joyful to see that on his every over,

CONTINUED NEXT PAGE

# DOES TIME CONTINUED

the horizon grew darker & darker. It was at this point the writer, (that's me) said to our friend that there was a movie on TV at 20:30 that he would like to watch & so he was going QRT.

The time at this moment in history was 20:21:52. That left plenty of time to wrap up the QSO nicely. Our friend plunged his mike button in & commenced his final over. He felt he should tie up any loose ends of our conversation, discuss the weather, his work, his dear wife, any hot gossip that he heard & of course throw the usual pleasantries my way before ending our contact. The storm was rolling ominously closer from the horizon.

The first, second & third minutes of his over passed quickly. He was up to the weather in Wollongong & how he thought he could thunder off in the distance, perhaps a storm was heading this way. Never a truer word was spoken, for the fourth minute was upon us & as the lightning struck our friends QTH there was a

blinding flash & almighty crash of thunder as that dreaded sound of 7275's Time-Out was heard. The sound, akin to a horrendous scream of agonising pain was heard far & wide across this great country of ours. (Perhaps I should congratulate VK2CAG on making the Time-Out sound such a beauty).

Our Amateur friend had joined the ranks of the others dammed by their friends for the cardinal sin of timing out. All was quiet.

A peaceful respite from the verbal abuse our friend had given the repeater before it's

final protesting & tormented scream.

The writer quickly flicked to the input, 147.875MHz (I didn't want to miss a word), & there was the painful yet somehow reassuring drone of our friend's voice. His signal was weak, but clear enough to listen to.

At this point I glanced at my watch, 20:26:45, surely it would not be long before I heard those two numbers I longed to hear - "73's". But no, it was not to be. The subject he was up to now was his

CONTINUED PAGE 8

WHICHEVER WAY YOU LOOK AT IT  
YOU CANT GO PAST

**MARIONA GARAGE**

FOR SERVICE CALL IN AND SEE

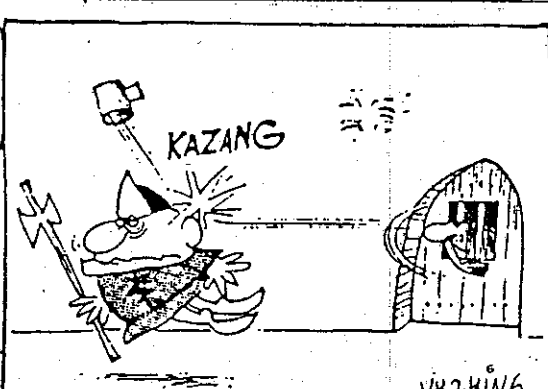
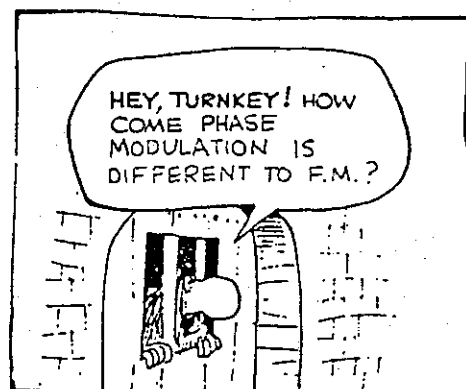
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- \* Front end alignment
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- \* And also Rego Checks.

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PHONE: 84 5650





# DOES TIME CONTINUED

dear wife. a really lovely woman. I checked my watch again, 20:29:55. The familiar sounds of the "20th Century Fox" theme music wafted there way from the lounge room to the author's shack.

Oh to be there with my wife & dog, but alas my amateur friend was more important. I continued listening. Now his subject matter had turned to the latest juicy gossip from around the airwaves. Now, I thought to myself, this is more interesting, the movie could wait a bit.

The time was now 20:32:24. It was then I heard those words that cast a sense of elation thru' my weakened body - "Oh well, that's it from this end, I'd better let you go".

Those last few words were a true indication of how I felt. my shack had taken on the feeling of a cell in solitary confinement section of Long Bay. During our friend's over, the world had been passing me by as I stayed loyally glued to the 2mx radio.

His farewelling pleasantries continued to issue forth from my speaker. It was now 20:35:20. Then the long-awaited sound of my radio's mute closing issued forth. The RF from our friend's radio had ceased.

With that noise I awoke from my hypnotised state & reached blindly for my microphone thru' my glazed & and weary eyes. This was it, my turn to transmit, I quickly glanced at my watch again, the LCD's flashed up 20:35:27.

I attempted a mental calculation of the full length of our friend's over. A total 13 minutes & 35 seconds.

taking 4 minutes off before the repeater shutdown, he had managed to Time - Out & render the repeater unuseable for over 9 1/2 minutes.

I gleefully informed him of his successful record - breaking Time - Out.

He seemed genuinely surprised & shocked about what had happend. He thought it was only a couple of minutes. (My time flies when your having fun!)

To this day we may all rejoice in the knowledge that if we ever find ourselves in

F.R.L. No: 3 Winners

Week No: 22. M. Woodward  
Week No: 23. I.A.R.S.  
Week No: 24. R. McKnight  
Week No: 25. G. Parsons

the unenviable position of being on the same frequency as our dear, dear Amateur friend and he is verbalising a great deal, just the mention of those two words - "TIME - OUT" will just about cease his proliferation of verbal exercise.

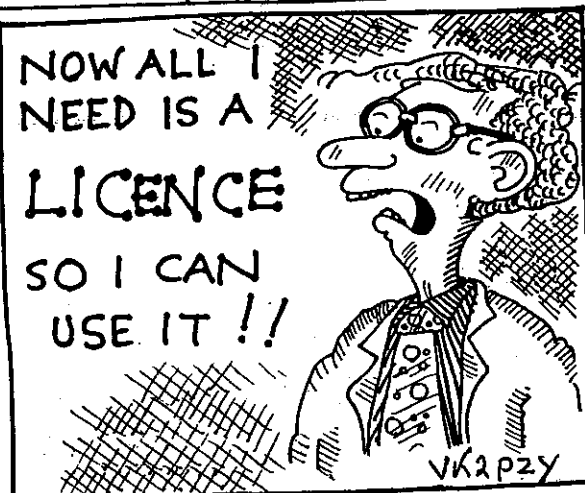
Now isn't that a happy ending ? That's the sought of story we all like to read.

P.S. While writing this story I've been listening to the local repeater & there is a few others out there in HAM-LAND that are coming awfully close to

- TIME- OUT . Who will be next ? Will it be you? I wish you good luck & listen to the pain from your MIKE hand. Don't ignore it or you could be next !!!!!

Best wishes to you & yours.

P.S.S. I told you I wouldn't let you forget Dave!!!! See ya' mate.





# REPEATER REPORT BY JOHN VK2XGJ

As this is the first edition for the New Year I'll wish all a Happy, Healthy New Year.

Much has happened on the repeater front over the last two months and a brief report follows.

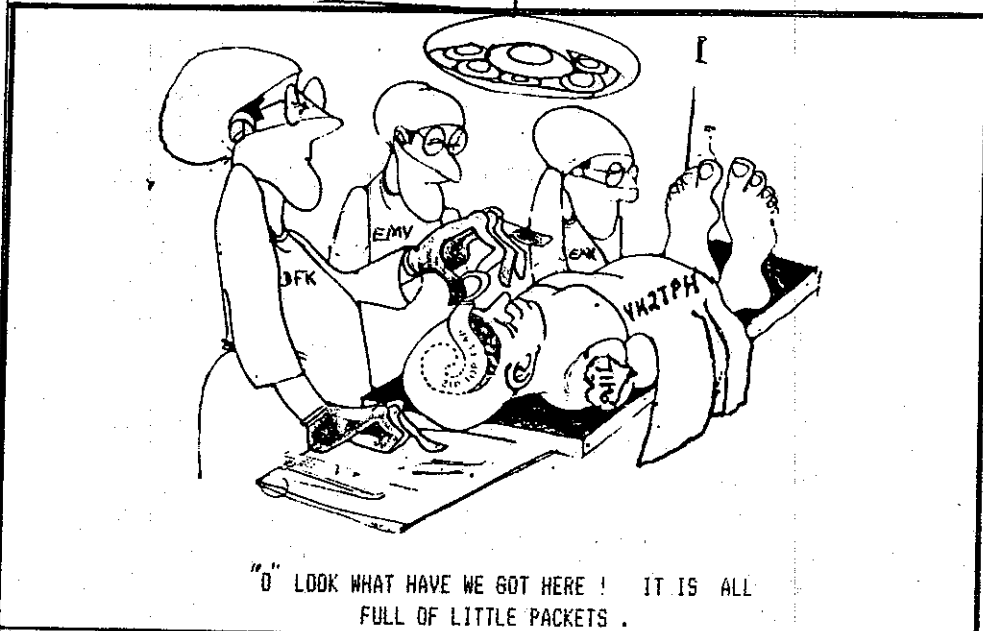
The renovated antenna for VK2RAW was installed in double quick time on Monday 7/12/87 and tests showed that the pattern of propagation was almost the same as the original antenna. Thanks to VK2XIN, VK2FCP for the assist on the day and thanks to Reg VK2EMI for the quick rebuild on the antenna.

Over the next day or so an amount of interference was noted and a phone call to the units owners had it fixed in a few hours.

A couple of minor re-appearances (possibly tests!!) and all has been well with VK2RAW until Monday 11/1/1988 and a sudden lack of interest by VK2RAW prompted a visit to the site to find that all seemed well and on the

will acknowledge Phil's effort for the club members by sending him a letter of thanks in the very near future.

The Sublime Pt repeater VK2RIL on 70 cm has been also withdrawn from service for a tune-



advice of Graeme VK2CAG the Rx was brought down to the workshop.

For some reason the six CMOS FET's inside the Rx had died of old age. At least that is the only reason that can be given after lasting thru one of the most spectacular electrical storms seen on the coast

for many a year, not four or five days previously. VK22RAW is once again on-air. With the compliments of VK2KPL-Phil from Mossvale, and the courtesy of VK2EXN who went to the trouble of going to Mossvale to pick the MPF-121 up from Phil and delivering them to Graeme.

The Illawarra Amateur Radio Society

up and general overhaul and will join the 2Mx repeater 147.275 in its new position inside the Rangers shed.

The move from the outside of the Rangers Shed was carried out on 9/1/88 under the watchful eye of VK2CAG and with VK2BIT and VK2XGJ supplying the muscle.

After fitting the filters supplied by one of the local commercial firms all interference was attenuated. Test carried out later proved that there was no de-sense even tho the antenna were virtually side by side.

That's all for the moment and see you all at the meeting ...

73's John VK2XGJ...

## COAST-WIDE COMMUNICATIONS

LOT.B. LAWRENCE -  
HARGRAVE, DRV. THIRROUL

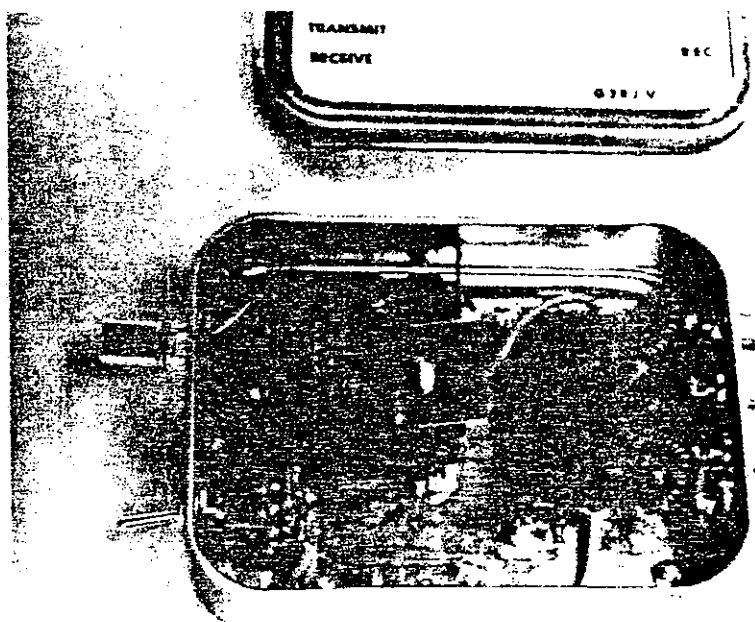
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PHONE: 67 2134.

VK2KWN WAYNE NEWPORT

# KITCHEN TABLE CONTINUED

An inside view of the transmitter; note the small piece of printed circuit board material soldered onto the VMOS PA transistor tab as a heatsink.



the keying action to pull in a changeover relay. A slide switch could be substituted for the toggle switch, which would be cheaper, but I find them very prone to poor contacts.

## Construction

The transmitter is built onto two small offcuts of Veroboard. I don't usually like Veroboard construction but the TTL section of the circuit seems to lend itself to this method of construction. One board holds the transmitter electronics and the other, smaller, board the low pass filter; these are shown in Fig. 4 and Fig. 5 respectively. The diagrams use the usual convention of showing where a break in the copper strip occurs by a cross and underside joins in the copper strips by means of a dotted line. The wary might like to use an IC holder for IC1 but I merely soldered mine directly onto the board. When building with Veroboard, do check the soldering carefully for accidental bridges between tracks of the copper strips. The Low Pass Filter board is smaller and the leads to and from this board ought to be screened; I used thin microphone cable which works well for the very short runs required, although no doubt the purist will use 50 ohm cable.

The whole transmitter is mounted into a single two-ounce (they usually have some funny markings to do with grams on them these days) tobacco tin. There is plenty of room in the tin when both boards, the sockets and the crystal holder and switch have been mounted. I reckon I could still get at least an ounce of tobacco in mine! I use the small inexpensive phone plugs for all terminations at my station. At the power levels I use they are good up to VHF and very cheap and easy to obtain. The single hole mounting type which I favour do have an annoying habit of loosening off in use and I usually add a corrugated lock washer under the nut for extra security.

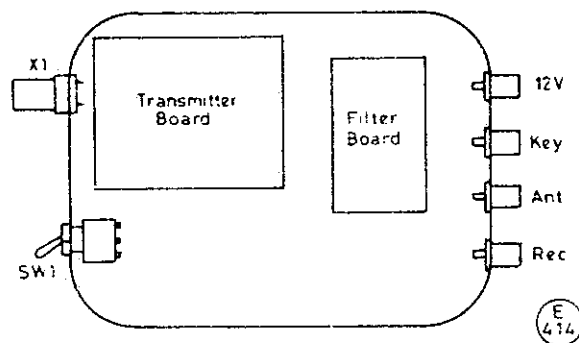


Fig 6 LAYOUT

The tin is embellished with an insert, on the lid, of thin card which bears the markings and legends shown on the photographs. Just cut a thin piece of card to fit, mark it with Letraset or other suitable lettering medium, stick it onto the tin lid and cover it with a layer of the clear sticky-backed plastic film obtainable from stationers. The photograph of the inside of my prototype will reveal another couple of oddities. First of all the number of capacitors in the low pass filter. In spite of Mr. Wetherhold's attempts to ease the problems of finding suitable capacitors for the filter, I could not find single capacitors to use for C3 and C5 in the circuit; hence two are used in parallel. The solder blobs reveal another attempt at cheapness: I did not mount my board away from the bottom of the tin with expensive standoff pillars but merely used pieces of bent stiff wire soldered onto the earthy points on the boards, then directly onto the bottom of the tin.

## Results

Well there it is, no threat to hi-tech but a simple, very cheap, little transmitter. The power, about 1 watt of RF output, is enough for some useful contacts on 80 metres. The crystals I used were from the source named in the Table of Values, and the rather posh HC25U type mountings, but any surplus 80-metre CW band crystals should function very well in this circuit. Within five minutes of building the little transmitter, in fact before it was in the box, I had my first QSO. I received 579 from a station in Surrey, from my QTH in Lancashire. The little box was feeding my G5RV antenna via a homemade Z-match ATU.

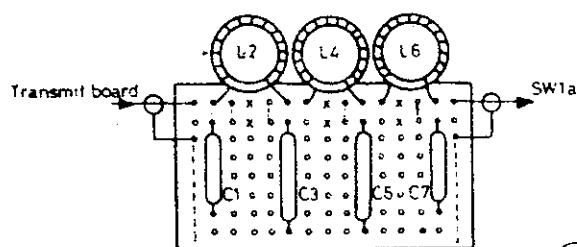


Fig 5 FILTER BOARD

# HAPPY EVENT FOR PETER & NINA

A special event has come into the lives of Peter (VK2BIT) and his wife Nina Woods.

This event was the Birth of their 8lb 7oz Baby Sun born to Nina at Wollongong hospital on Tuesday the 5th January 1988 at the usual early hours that Babies decide to arrive into this world.

In the case of SCOTT PHILLIP (this is the new arrivals name), it was 3:40.am. and this was after being 2 weeks late.

Club members I am sure will join me in offering CONGRATULATIONS to you Peter and to you Nina who did all the hard work.

Lots of good luck for youall for the future.

-----



"Which one of you fellas is the best TV repairman?"

## NEWTEK- ELECTRONICS

WE STOCK:  
ALARMS - ANTENNAS  
BOOKS - BOXES  
COMPONENTS-COMPUTERS  
HARDWARE - KITS - TOOLS  
WIRE AND A LARGE RANGE  
OF SEMICONDUCTORS FOR  
THE PROFESSIONAL AND  
HOBBYIST : 116 CORRIMAL  
STREET. WOLLONGONG.  
(JUST FROM HARP-HOTEL)  
PHONE : 27 1620.

## HAPPY HARRY

The December general meeting was our XYL & YL night, when the XYL's & YL's join us for Xmas social evening. The meeting was well attended and enjoyable evening was had by all.

Lots of XYL's & YL's turned up. After a brief meeting a ragchew evening followed by supper of goodies provided by the Ladies was enjoyed.

The Xmas Hamper raffle was drawn and was won by Harry VK2JHW.

\*\*\*\*\*

### QUOTES:

\*\*\* Knowledge is of two kinds. We know where we can find information upon it. \*\*\*

\*\*\* Better an empty purse than an empty head. \*\*\*

# GIVE THIS A THOUGHT

One of the key-note speakers at the IARU Region 1 Conference in April this year was the Director General of the Dutch PTT, Mr.C. Wit. He sounded a warning that, specially on the VHF and UHF spectrum, many commercial and government organizations are just waiting to grab some of the amateur frequencies.

All they are waiting for are two things, under utilization and wrong use of the bands. Mr. Wit therefore urged the region 1 amateurs too keep the official band-planning agreements and to the regulations covering their licenses.

If amateurs do not adhere to these requirements they will firstly spoil it for those who do comply with the regulations and secondly will cause a chaotic situation, often with bad transmissions and intolerable behavior, thus endangering the continuity of the amateur radio service.

Mr. Wit emphasized again that such behaviour on the VHF and UHF bands is all that the other services are waiting for. Although coming from Holland, the warning is equally valid everywhere in the world of amateur radio.

taken from W.A.R.C.  
October.2. 1987.

# THE ILLAWARRA AMATEUR RADIO SOCIETY. INC.

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

**MEETINGS:** Are held every 2nd Tuesday of the Month except January, at 7.30.p.m. in the S.E.S. Headquarters, Montague street, North Wollongong.

**REPEATERS:** VK2RAW - 146.850. - (VOICE) VHF Mt Murray.  
 VK2RAW - 147.575. - (PACKET) VHF Mt Murray.  
 VK2RIL - 147.275. - (VOICE & R.T.T.Y) VHF Sublime Point.  
 VK2RUW - 438.225. - (VOICE) UHF Hill 60 Port Kembla.  
 VK2RIL - 438.725. - (VOICE & R.T.T.Y) UHF Sublime Point.

**BROADCAST:** On Sunday evening prior to the club meeting, at 7.00.p.m. R.T.T.Y. Mode, and at 7.15.p.m. on voice. Transmitted on 147.275.VHF, and relay on 3.562.Mhz. Callbacks will be taken after the voice broadcast.

**W.I.A. RELAY:** On 146.850. at 11.00.am. and at 7.30.p.m. each Sunday.

**CLUB - NETS:** On 3.562.Mhz. SSB on Sunday at 8.00.p.m. and a slow morse net on 28.440.Mhz on Thursday evenings at 8.00.p.m.

**NEWSLETTER:** "THE PROPAGATOR", published Monthly to reach FINANCIAL-MEMBERS in the week preceeding the club meeting. All articles, adds etc, to the editor must be in, or try, by the 3rd Tuesday each month.

**MEMBERSHIP:** The Secretary, I.A.R.S. Inc, P.O.Box.1838. Wollongong. 2500. Full membership is \$10 per annum; students & pensioners concessional members \$5 per annum.

**AWARDS:** The Award of the Illawarra Amateur Radio Society. Inc. is the LAWRENCE-HARGRAVE-AWARD. VK stations require 10 contacts with I.A.R.S. members. Overseas stations require 5 contacts with I.A.R.S. members. A contact with VK2AMW is sufficient for the award. Band-details, date, frequency, station worked and \$2 or 4 I.R.C.'s to THE AWARD-MANAGER, I.A.R.S. Inc, P.O.Box. 1838. WOLLONGONG. 2500. No QSL-CARD is required.

**STORE:** The club store operates at each club meeting. by COMMITTEE-MEMBERS.

### COMMITTEE:

**PRESIDENT:** VK2DYU- BILL CHADBURN. 45 Beltana Ave, Dapto.  
**VICE-PRESIDENT:** VK2OB - KEITH CURLE. 24. Beach Drv, Woonona.  
**SECRETARY:** VK2JTB- TOM BROWN. 10. O'Keefe Cr. ALBION - PARK.  
**TREASURER:** VK2VAV-YKO-DAVE HENDERSON. 8. Gladstone st. Bellambi.  
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 VK2XCC/PHD - RAY BALL.

**REPEATER - CHAIRMAN:** VK2XGJ - JOHN SIMON.

**REPEATER - COMMITTEE:** VK2CAG - GRAEME DOWSE, VK2EXN - IAN CALLCOTT,  
 VK2EMV - MORRY .v. d. VORSTENBOSCH. VK2DFK-MIKE KEECH, VK2MT-ROB McKNIGHT,  
 VK2BIT-PETER WOODS, VK2TPH-PHIL HOWCHIN, VK2XGJ-JOHN SIMON, VK2FCP-FRED BROWN.

**QSL-CARD'S OUT :** VK2EXN - IAN CALLCOTT.

**QSL-CARD'S IN :** VK2BIT - PETER WOODS.

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 VK2PZY - DAVE CAPON.

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**CANTEEN-MANAGER :** VK2DYU - BILL CHADBURN.

**LIFE - MEMBERS :** VK2CAG-GRAEME DOWSE. VK2OB-KEITH CURLE. VK2ALU-LYLE PATISON

**SUNDAY - EVENING - CLUB-NET - ROSTER:**

FIRST SUNDAY OF THE MONTH : VK2MT - ROB McKNIGHT.  
 2nd SUNDAY OF THE MONTH : VK2ENX - TONY MOWBRAY.  
 3rd SUNDAY OF THE MONTH : VK2PZY - DAVE CAPON.  
 4th SUNDAY OF THE MONTH : VK2PHD - RAY BALL.  
 5th SUNDAY OF THE MONTH : VK2EBI - KEVIN MURPHY.  
 And on stand-by : VK2DUP - GRAEME PARSONS.