

BULLETIN ISSUED BY THE NORTHERN ZONES OF THE
WIRELESS INSTITUTE OF AUSTRALIA TASMANIAN DIVISION

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PRICE 5¢

This is to remind our associate members that applications for the ACCP and ALCP examinations to be held on Tuesday 15th August will have to be in the hands of the Superintendent Radio Branch on the 8th July. Each application must be accompanied by a copy of your birth certificate and the fee of \$2.00.

The examination consists of a written examination of $2\frac{1}{2}$ hours duration on Radio theory and another of 30 minutes duration on Regulations. To secure a pass in these subjects you must obtain at least 70% of the total marks allotted in each.

You'll only have a few days left to get your application in the mail so do it now! If you don't think you are ready, do the exam anyway. You might be surprised and if you do fail, you will be notified what your marks were, thus giving you some idea and how well you know the subject.

I have some application forms for those that need one, all you have to do is ask.

JOHN. VK7JV

MEETINGS

July 4th	North West Zone at Lakin's Hall, Ulverstone
July 14th	Northern Zone at A.E.B. Rooms, 51 York Street Launceston.

YRCS CLASSES

July 15th & 29th	10.00am, Room 38 Kings Meadows High School.
August 3rd	I.R.E.E. Lecture on Communications by Mr. R. S. Colquhoun, Gas Co. Showrooms, St. John Street.

NORTHERN MEETING NOTES

Twenty seven persons attended the June meeting. Discussion took place on repeater planning and clubroom.

A new position, Fund Raising and Publicity Officer was created and John 7JV was appointed to the post.

Four applications for W.I.A. membership were passed on to Council for their consideration.

G. de Groot VK7ZGD (full)

P. Feltham (associate)

P. Szoka (student)

P. Anslow (student)

To streamline business at normal meetings it has been decided to hold executive meetings the week before each general meeting. If members feel there are matters that should be aired at such a time rather than open meetings speak to an executive member about it.

A talk on AINT - 3 transmitting equipment was very ably delivered by Bill 7AK. His lucid explanations led us through the complete system right to the top of the 200ft. aerial tower.

The July 14th meeting will be a member's slide evening - bring along about 6 slides of electronic subjects. Remember your bikini girl must be at least carrying a transistor.

Rumour has it that an equipment display night is not far off - be prepared!

Repeater Conference

A conference will be held in Wodonga on July 1st. Peter 7PF will be representing the state. Matters requiring consideration include

- (a) changed frequency channels.
- (b) ident problems.
- (c) allocation of channels.
- (d) tone control.
- (e) linking repeaters.

Advantages in using the same channel as Geelong/Traralgon were pointed out - easier to spot band openings and increased likelihood of DX contact.

Channel changes are expected to be made at the beginning of December. Current ideas are to move transmit frequencies above receive channels and place a new simplex channel between them. If anyone has any brilliant ideas no doubt Peter would appreciate hearing from you before the conference.

Northern Clubrooms

Councils in the Launceston area are to be approached to establish if leasehold land might be available for our use. Requests are also to be made for land for suggestions as to areas where freehold land would be of use to us. With a definite plan in mind it was felt our money-raising efforts would be more fruitful.

Once again - ideas please.

Theory Classes

With the help of Wal 7ZWX Brian 7RR the WIA's Launceston YRCS classes now meets in two groups. The advanced group may be of assistance to non school students studying towards ACCP exams. Teaching notes and assignments set for this group would, no doubt, also be helpful. If you want help in this direction - whether beginner or near ACCP level - contact 7KK, Phone 003 - 444181.

NEWS FROM THE NORTH WEST

On the last weekend in May four mobiles, 7AX, 7MX 7ZIE and 7ZAR organised a 2M FM safari into the hinterland. Two units travelled from Forth via Wilrot and Meina, and the other two via Sheffield all meeting at the Mr. Claude lookout. From there they continued at intervals to Lemonthyne picnic area for a barbecue lunch. Some interesting and surprising communication took place and a great deal was learned from the day out. The weather was perfect and the bush beautiful and everyone agreed that there will be more of this sort of exercise. Associate Glen tagged along and helped with the fire.

On the nights of 28th and 29th May, 2 metres opened but late in the evening. Our June meeting went off very well with 11 in attendance including Ken 7AI whom we were very pleased to see. The proposed 1973 Jubilee award was discussed and the meeting agreed that the organisers have done a fine job. Several of the boys collected in Tony's immaculate shack for an after meeting ragchew, some collecting wives who habitually keep Rosemary company while the one president conducts the meeting. Thanks Rosemary.

The 2M band is very lively here as several operators can work through channel 4 repeater. Brian 7ZBE explained that he was "having a ball" since discovering that he can work via the repeater.

My forecast re 7TT is working out. He has been heard faintly on the Sunday call back. Keep stoking Terry.

7MX

PETER VK7PF will be attending the repeater conference in WCDONGA in July to discuss repeater channel frequencies amongst other things so if you intend buying Ch 4 Xtals you had better wait until we hear the outcome of this conference.

DEN VK7DK was in Hobart for a couple of weeks studying up on VHF techniques. May be he'll put some of his knowledge to work on the amateur VHF bands.

NO MORE Indian wrestling for a while for ERIC VK7EC, the last bout resulted in a broken thumb!

THE 2 metre band is going crazy; so far this year there hasn't been a week without 2 metres opening to VK3 even if only for a couple of hours.

Offers are invited for the following equipment from the estate of the late Dr. Ian Pearson. For further information apply to MAX IVES, VK7MX, DCX 12, EAST DEVONPORT, PHONE 278946 or business 241911.

1. Yaesu FTDX400 Transceiver, with P.T.T. mike, foot controls and fan attached
2. Speaker to match above
3. TH6FX Trap tuned Beam with co-ax cable
4. Erector Antenna Rotator 1100M with 7 core control cable and control unit
5. 14AVQ Vertical Antenna with Co-ax cable.
6. Automatic Keyer Model ETM2
7. Kyoritsu Model K108 SWR Meter
8. Pair Foster RDF207 Stereo Headphones
9. 3 Position Co-axial Switch
10. EF30DX Lowpass Filter
11. Astatic T3 Crystal Microphone
12. Heathkit F.M. tuner FM3A. 7 Valve Line-up 88-108 Mhz

Also the following Technical books -
 1968 R.S.G.B. Handbook - SSB ARRL Handbook - Radio Engineers Handbook - Basic Mathematics (Maedol) - Applied Mathematics for Radio Engineers - Basic Radio (J. Barton Hoag)

GREEN JAPANESE CERAMIC CAPACITOR MARKINGS (By Courtesy G.A.R.C.)

Several people have expressed difficulty in determining the actual value of capacitors currently being sold.

The markings on the capacitors at first appear to be misleading, but they are in fact a variation on the standard colour code type of marking.

EXAMPLES:	MARKING:	ACTUAL VALUE
	471	470pF
	222	2200pF
	102	1000pF

From the above examples, it can be seen that the first two digits mean what they say, but the third digit is the one to watch. It in fact indicates the number of zero's to append to the first two numbers. From the final example above, it can be seen that we don't have 102pF but 10 followed by two zero's making 1000pF.

NOTE: This applies to capacitive values over 99 only, as for example a 47pF is marked just 47.

RESISTOR/POTENTIOMETER CIRCUIT DIAGRAM MARKINGS:

Most circuitry and some components of European origin employ a marking system which has lead to some confusion.

EXAMPLES:

1K5	1.5k Ohm
2M2	2.2M Ohm
6K8	6.8k Ohm
68K	68k Ohm

This system is quite simple, it simply involves replacing the decimal point with the multiplier symbol. Thus overcoming the problem of determining whether the spot on the page is really a decimal point.

EQUIPMENT STORE NOTES

We have just obtained a complete range of resistors and are holding up to 100 of the popular values.

Fibreglass blanks for 5/8 wave whips on 2 metres and helical whips for H.F. are still available at \$1.70 each.

We also have a good range of ceramic capacitors 50VW. Price is only 5¢ each.

Printed circuit board has been ordered and we may have it for the next meeting.

CLUBROOM ACCOUNT

We have deposited the first \$100.00 so are off to a good start. If you have sold the tickets please contact John 7JV for more if required. John still has available the following items, the proceeds of which will go to the account.

3-30 PF beehive trimmers chassis mounting type at 30¢ each.
D type Xtall sockets (chassis mounting) 20¢ each
8ft lengths 12 core cable good for control purposes or
strip for Hook up wire - \$1.00 per length
Used 6" speakers in Box (ex Mobiles) 3 and 15 ohm - \$1.00

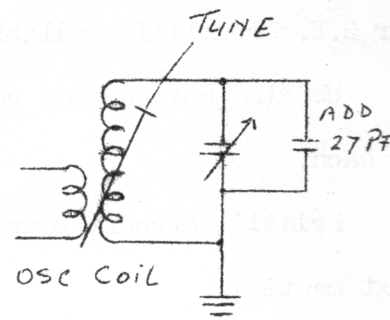
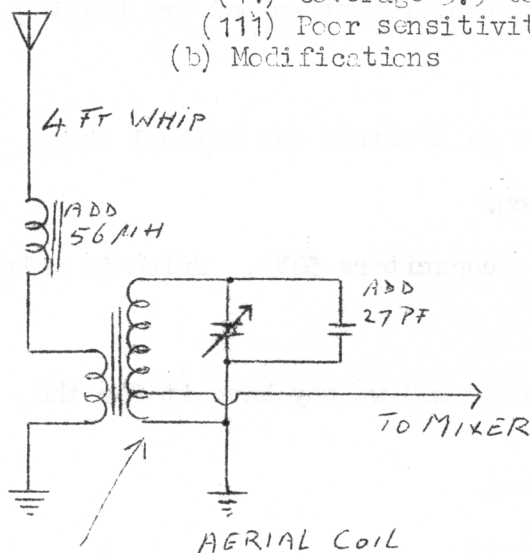
STOLEN PROPERTY

A 25 Watt fully solid state STC Mobile (Low band) Serial No. 22625 was stolen from a car in Launceston, should this equipment be offered to you please notify the Police or NORM RICHARDSON at S.T.C., Phone 312511 and ask for STC.

THE I.R.E.E. invited Northern amateurs to attend a lecture by Peter White on HYPERBOLIC NAVIGATIONAL SYSTEMS which included the Loran, Decca and the Omega systems. We have again been invited to attend a lecture by Mr. R.S. (STEVE) OLLIPHANT on Communications on 3rd August in the Gas Company Showrooms.

The shortwave band included on some transistor portables can be made useful for fox hunting or general purpose receiving by means of a few simple modifications.

- (a) Original performance on typical unit
 (1) tuning rate quite impossible on 40Mx
 (11) Coverage 3.9 to 15 Mhz
 (111) Poor sensitivity at high end
 (b) Modifications



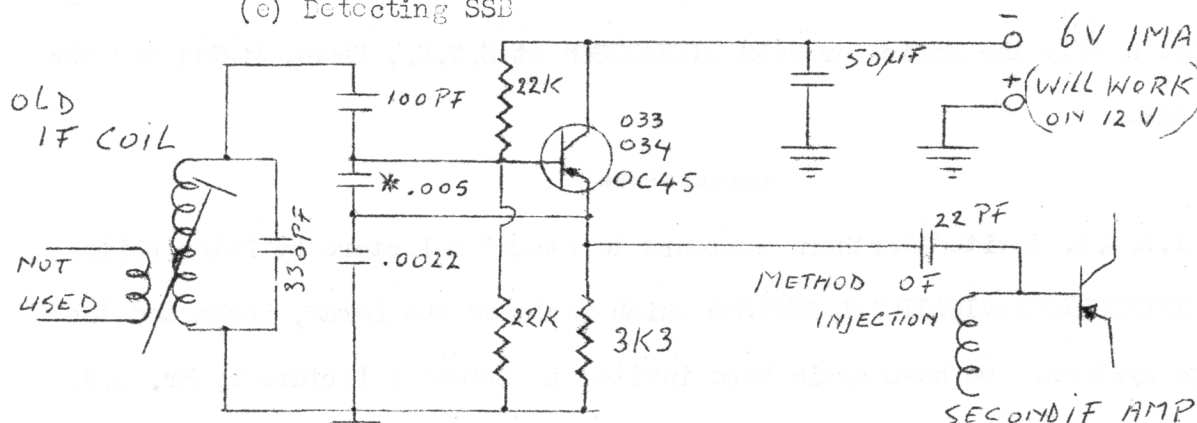
ADD 2 TURNS

(c) Effects

- (1) Adding turns to aerial coil (and fine tuning by sliding coil along ferrite rod) plus screwing in oscillator slug, lowers tuning range to include 80Mx
 (11) Adding 27PF padders bandspreads 40Mx maximum frequency is now 7.5Mhz keep WNG for time checks and frequency marker
 (111) The 56Mh choke, ex computer board is necessary as a loading coil, since a 4Ft whip hardly approaches a resonant length on 40Mx (about 33 ft.)
 tune antenna by adjusting length this is not critical since the circuits are so long, though the improvement in sensitivity is really astounding.
 Note that provided it is resonant the amount of signal delivered by a short whip is independent of its length there is no point of installing a ten foot tank whip or some such.

- (d) Where receiver use is quasi portable external batteries or mains supply can be connected via the headphone jack (otherwise disused) automatically disconnecting the internal supply when plug is pushed in

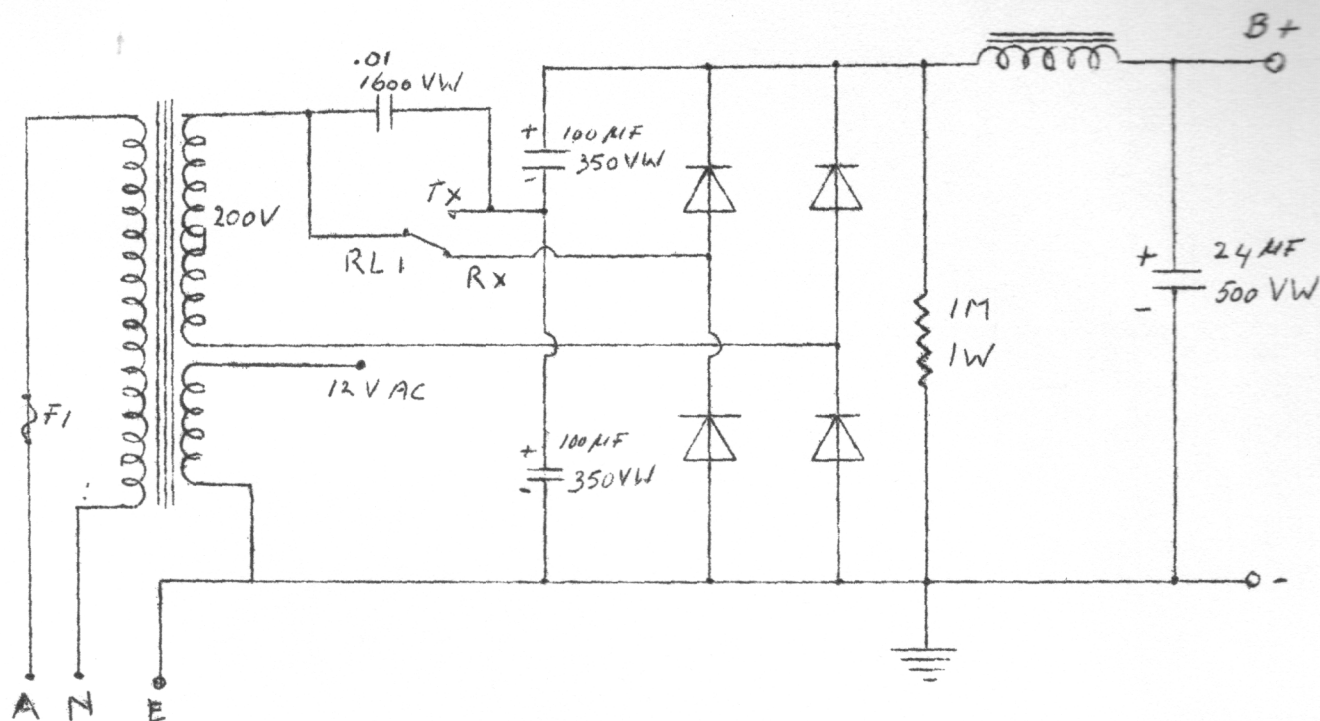
(e) Detecting SSD



* This valve should be as large as possible while still starting C.K. To ensure a clean waveform and stability its actual value depends on the gain of the transistor

DICK VK7ZDF.

CIRCUIT CONTINUED FROM LAST MONTH



The Faraday lecture will be held live in Launceston on the 18th of October; this is a lecture of World class and I am told requires a truck-load of equipment. It will be held in the upstairs Gallery of the Museum and tickets will be available free to all members of the Northern Zones. If you intend to attend this lecture please notify our Secretary, REG VK7KK as soon as possible so that arrangements can be made.

JOE VK7ZGJ has been having regular skeds on 6 metres meteor scatter with VKSZWW average signal reports are 4/3 with occasional bursts of 5/9.

Heard JACK VK7JB mention that he had a contact on 160 metres with the U.S.A. report was 5/7/9.

BOB VK7ZRG found a spurious signal when tuning his receiver, after much searching found it was the local oscillator of his F.M. unit left switched on in the car!

I have been informed that the Launceston Reference Library is open until 10PM on week days and Saturday from 9.30am until 6.00pm and have the following magazines - Wireless World in Bound Volumes, Electronics Australia in Bound Volumes, A.W.T., Popular Electronics (USA) and the IEEE Journal. Photo copies are available on the spot at a low cost.