

THE WIRELESS INSTITUTE OF AUSTRALIA

TASMANIAN DIVISION

NOVEMBER 1965

BOX 851J, G.P.O., HOBART

MONTHLY BULLETIN

PRICE 6d.

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VK7AL

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Registered at G.P.O., Hobart, for transmission by post as a periodical.

EDITORIAL

Editorials are not intended as locturettes, however they may be written to point out certain facts, which, to some may appear obvious, to others somewhat abstract.

Some years ago my Father remarked to me " One gets out of an organisation what one puts into it." At the time the statement seemed vague - perhaps even slightly grammatically incorrect.

After I had reached the age of manhood (I was going to say maturity, but I dont wish to leave myself open to the cynics) like Mark Twain I began to realise the OM had learned quite a lot since I was a kid.

OK, I'll get to the point. Especially since joining the Institute, being on Council, and even after being "pooled" into jobs (ie. Bulletin Editor) I have " got the message " - for what little I have done I have reaped a greater amount of pleasure. The friends I have made, the help I received, has many times more than repaid.

To those who have not realised this from the Division - well - all I can say is, perhaps you have not done anything for your Division.

Ted VK7EB.

MEETINGS FOR NOVEMBER

- NOVEMBER 2 North Western Zone, Lakin's Hall, Ulverstone. 2000 hours.
3 Headquarters General Meeting, 147 Liverpool St., Hobart. 2000 hours.
12 Northern Zone, Adult Education Centre, 51 York St., Launceston. 2000 hrs.
15 Council Meeting, Hobart. 1930 hours.
17 Headquarters V. H. F. Group. 2000 hours.

JAMBOREE OF THE AIR

On behalf of Council I extend a hearty thank you to all VK7 Amateurs who assisted during the Jamboree of the Air. Thanks also to the 6~~ny~~ boys who assisted when needed - just shows what can be done at very little notice.

HEADQUARTERS GENERAL MEETING

The following shall replace the usual lecture at your next November General Meeting.

1. A " No reasonable offer sale " on Disposals
2. A " small " talk by Len, VK7LE " Further Observations on Meteor Scatter Propagation."
3. RAG - CHEW - We dont have this opportunity often so roll along and really make the most of having a good old "ear bash".

NORTH WESTERN ZONE MEETING

Everyone is requested to bring along electronic puzzles, trick circuits, and ohms law problems etc. There shall be a PRIZE for the best offering for the night.

David, VK7MS shall give a Lecture on " Tuning the Quad ". Roll along you DX hounds, this is one evening you just cant afford to miss.

CONGRATULATIONS

To Jack, VK7JB on receiving the " THANK YOU " Badge from the Scouts of the 13th. Hobart Group (Vx7BS).

To those who are not conversant with Scouting Awards the " Thank You " badge is usually awarded to lay people (non scouters) who have rendered a long and valuable service to the Group with whom they have been associated - I believe the usual qualifying period is somewhere near twelve or more years and then only when approved by the State Chief Scout. Well Jack has not done the twelve years business but the boys considered he had done as much for them as most would in that time.

REMINDER

Hon. Treasurer has asked, pleaded, and even threatened me to make the following important announcement. If YOU - and this means YOU send him any money P - L - E - A - S - E let him know WHAT IT IS FOR and WHO IT IS FROM. He is good, in fact darn good, but the Division does not issue him with a Crystal Ball - Thank you.

FOR SALE

VK7OM wishes to dispose of all Surplus Gear.

NO REASONABLE OFFER REFUSED - Usual Commission on sales will be paid to the W.I.A. Complete C.W./AM TX (Converted AT5) and modulator. This was late main rig of VK7OM (before he learned to quack - Ed.)

AT5 TX suitable for wrecking. Large quantity of valves, condensers and other parts. Bob will be home SUNDAY morning, and subsequently at other times by arrangement.

STOP PRESS

I am very relieved and pleased to announce that Chas, VK7CH is still with us. He was not murdered or eaten by the savages in the wild North West. My arch spy, VK7MX has reported VK7CH's attendance at the N.W.Zone meetings. Thanks Max, not only have you one of the loudest signals up there, apparently you are also one of the few who have learned how to write - hi.

- H A M F E S T -

ON BEHALF OF YOUR COUNCIL AND THE ORGANISING COMMITTEE I EXTEND A CORDIAL INVITATION TO ALL MEMBERS? THEIR WIVES AND CHILDREN TO ATTEND THE W. I. A. TASMANIAN DIVISION HAMFEST AT CAMPBELLTOWN ON THE 27th. and 28th. NOVEMBER 1965.

REMEMBER EVERYONE WILL BE CATERED FOR - NOBODY SHOULD FEEL LEFT OUT.

Sweets and games for the children - events for the ladies - special professional instruction on being a dead shot with the rolling pin (lady students only) just line the OM up and in one short lesson you wont miss.

PROGRAMME

5am Waken the President and a few others by remote control (long distance & not audio)

10 am Arrivals, Introductions, name tags for all.

10. 30 am Inspection of gear - Line up all vehicles containing gear. Transmitter hunt
Rag Chew for Ladies, childrens game.

11.30 am Rag Chew with Council - Guess the Frequency - Childrens Treasure Hunt.

12.00 Lunch

1.00 pm Interzone competition.

1.30 Cricket Match. Present Northern Champions versus South for Trophy.

2.15 pm Ladies Competition, throwing the rolling pin, childrens game.

2.40 pm Cuppa Time.

3.00 pm Final Transmitter hunt.

REMEMBER, A GOOD ATTENDANCE WILL MAKE A GOOD HAMFEST - LET US MAKE THE 1965 HAMFEST THE BEST EVER - TOM AND I DONT MIND GETTING UP AT 5 am PROVIDED YOU REALLY ENJOY YOURSELVES - THE OBJECT IS FOR EVERYONE TO HAVE A REAL BUMPER TIME.

WE ARE LOOKING FOREWARD TO SEEING YOU ALL THERE.

P.S. Anyone got any running spikes ???????????

BOOKS

The following books listed with prices can be obtained by your division provided enough are interested - If you would like to purchase any of these, drop a line to Hon., Secretary and let him know your requirements - remember this service is available provided there are enough orders. All are A. R. R. L. publications.

The Mobile Handbook for Radio Amateurs.....	27/-	\$2.70
Single Sideband for the Radio Amateur.....	27/-	\$2.70
The Radio Amateur V. H. F. Manual.	20/3	\$2.02
The A. R. R. L. Antenna BOOK	20/3	\$2.02
Hints and Kinks	11/3	\$1.12
Learning the Radiotelegraph Code	4/6	\$0.45

Please adjust your receiver to maximum sensitivity and LISTEN before coming on the frequency, band conditions are such that near stations are not hearing each other which can unless one listens a little longer than usual, somewhat confusing.

TECHNICAL

Acknowledgement to the W.A. Bulletin for this months article.

ELECTRONIC IGNITION FOR I.C. ENGINES.

This month there will be a departure from the usual article on radio matters, but it could be of interest to most Amateurs who own cars.

The conventional ignition system consists of a coil, a set of breaker points and a capacitor as well, of course, as a distributor etc. on the H.V. side. The disadvantages of this system can be listed as follows :-

- (1) The large value of current being interrupted, by the contact - breaker points, causes excessive wear.
- (2) The moving arm of the contact breaker tends to bounce at high speeds, thus shortening the time of the closed period and so causing contact wear.
- (3) A larger reduction occurs in the output spark voltage with increasing spark repetition frequency, ie. engine speed.
- (4) This system is highly inefficient at low speeds due to the high current required.

Alternative ignition systems are possible and these overcome some of these disadvantages. A system which has been given quite a deal of publicity lately uses a power transistor to switch the high currents through the coil and in this system the points then only provide the base current for the power transistor. By using a suitable coil and higher primary currents in the coil (3) is overcome to a certain extent and (1) is overcome. However (2) is not affected and (4) is worse due to the higher primary current through the coil.

Probably the most promising system at the present appears to be a capacitive discharge system using a S. C. R. (Silicon Controlled Rectifier) as a switching element. In this system a capacitor is charged up to a high voltage (approx. 300 - 400 volts) and this is switched through the primary of the coil (a standard coil can be used) by a S. C. R. triggered from the breaker points. By incorporating a delay system it is possible to alleviate the problem of contact bounce to a certain extent. (1), (3) and (4) are overcome by this system. The ideal solution to the contact bounce problem appears to lie with the elimination of the " points " and using a magnetic pick - up and pulse amplifier using transistors.

Actual tests using one of these systems show an increase in b. h. p. and a reduction in fuel consumption over a conventional system, probably due to the more efficient ignition employed. No circuits will be given here as these can be obtained from references as listed below :-

- | | |
|-------------------------------|-------------------|
| (a) Electronics Engineering | December 1964 |
| (b) Electronics | October 5th. 1964 |
| (c) Electronics World | November 1964. |

PLEASE DONT FORGET NOVEMBER IS HAMFEST MONTH - I HOPE TO SEE YOU THERE