

THE WIRELESS INSTITUTE OF AUSTRALIA

TASMANIAN DIVISION

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

May 1965

M O N T H L Y B U L L E T I N

PRICE 6d.

PRESIDENT: Mr. T. Allen
 VK7AL

TREASURER: Mr. V.F. Dore
 VK7JD

SECRETARY: Mr. K. Spiegel
 VK7KS

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

GENERAL MEETING :

The next monthly meeting of the Division will be held in the Club Room, 147 Liverpool St., Hobart, on Wednesday, 5th. May 1965, at 2000 hours. The lecture is to be presented by Mr. Max Burn, the subject being " Radio Aids to Navigation ". As Max hails from D C A this should promise to be a very interesting and informative talk.

NORTHERN ZONE :

The next meeting will be held on Friday the 14th. May 1965, at 2000 hours. Unfortunately, to date I have not received any information in regards to the intended activities for the evening. The address of the Northern Zone Club Room is The Adult Education Centre, 51 York St., Launceston - support your Zone by at least attending the meetings - of course this applies to all Zones including Headquarters.

NORTH WESTERN ZONE :

The usual monthly meeting will be held in Lakin's Hall, Ulverstone on Tuesday, 4th., May, 1965, at 2000 hours.

V. H. F. GROUP :

The next meeting of the V.H.F. Group will be held at the Club Room, 147 Liverpool St., Hobart on Wednesday, 19th., May 1965 at 2000 hours - Where has the V.H.F. scribe gone ? Since you chaps like experimenting I am sure there are many who could be interested in what you are doing - I supplied you with some stencils, how about it ?

COUNCIL MEETING :

The May Council Meeting will be held at the Club Room on Monday, 17th., at 1930 hours.

SUGAR - UNCLE - BAKER - SUGAR - CHARLIE - ROGER - ITEM - PETER - TERE - ITEM -

OBOE - NELLIE : I believe this is outdated - read what it means - is yours outdated ?

ELECTION OF OFFICERS :

The following is the list of Officers of the Tasmanian Division with their corresponding duties being the result of the recently held election.

PATRON; L. Crooks VK7BQ

PRESIDENT : T. A. Allen VK7AL

VICE PRESIDENTS : T. Connor VK7CT ; I.A. Nichols VK7ZZ.

SECRETARY : K. Spiegel VK7KS.

TREASURER : V. F. Dore VK7JD.

COUNCIL : VK7AL ; VK7KS ; VK7JD ; VK7CT ; VK7ZZ ; VK7ZAS ; VK7EB ; VK7EJ (FED' Councillor)

QSL Manager : VK7JB .

Divisional Correspondent ; VK7ZAS.

Traffic Officer : VK7OM .

Publicity : VK7EB .

B'cast Officers : VK7GE ; VK7ZZ ; VK7EB.

Minutes Secretary : VK7ZAS.

Lecture Officer : VK7LE

Bulletin Editor : VK7EB

Librarians : D. Porthouse ; VK7ZAS.

Technical Editor : VK7ZAS

Solicitor : VK7ZZ .

Auditors : VK7CW ; VK7BJ.

T V I Committee : VK7KC ; VK7DW ; VK7ZJG ; Distribution Committee : VK7BJ ; VK7KA.

NEW MEMBERS :

The following have been referred to the General Meeting as applicants for membership - Messrs J. R. Stirling ; P. Aplin ; M.J. Knott.

TENDER : The successful tenderer for the Eddystone 640 receiver recently advertised in the bulletin was Mr. M. J. Healey.

ACKNOWLEDGEMENTS :

To VK7EJ, our Federal Councillor for giving his Easter (holidays ?) again to attend the Federal Convention on the Mainland. Perhaps few realise how much time and effort Ted subscribes to this thankless task - those who do say Tnx OM a job well done.

TO VK7ZAS ; VK7ZAI who have devoted considerable time and effort in converting the first shipment of Taxi Sets for Amateur use on 6mx. These sets were purchased for the Division primarily for use on W.I.C.E.N. I believe more sets are to come and indications are these two gentlemen are prepared to again donate their valuable experience in converting these also. Again we can only say Thanks - truefellows of the Amateur Code.

SUBSCRIPTIONS :

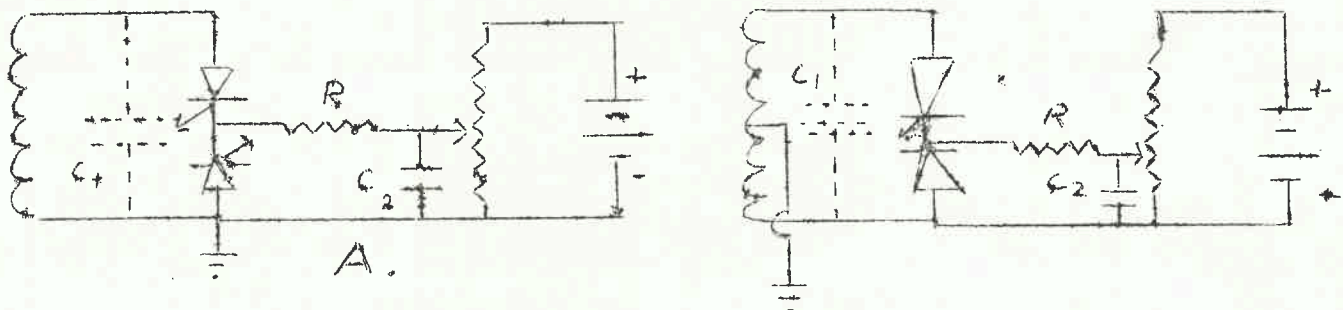
Subscriptions up to and including 19.4.65. Acknowledgement and thanks to the following ; VK7ZAA; VK7DK; VK7TE; VK7JB; VK7RL; VK7LE; VK7ZAZ; VK7ZDM; VK7AG; VK7ZBA; VK7ZAY; VK7ZAI; VK7ZBE; VK7CA; VK7SF; VK7PA; VK7ZAH; VK7KC; VK7ZAA; VK7EB; VK7SW; VK7LJ; VK7GV; VK7AF; VK7ED; VK7ZBK; VK7ZAT; VK7BL; VK7LL; VK7ZBR; VK7LL; VK7DZ; VK7MH; VK7DS; VK7RY; VK7MK; VK7BR; VK7PF; VK7EC; VK7MW; VK7TT; VK7ZBL; VK7KH; VK7MS; VK7XL; VK7LX; VK7EJ.

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TECHNICAL :

This month we have to say thanks to Lee Gunther, our very own Yank down under. This I believe could be one of many such technical articles offered by Lee, he is simply crazy (about transistor and diode applications I mean) . Lee is one of the "back room boys " at the University, an ex W call sign who has come here to live. So much on Lee, now to get on to the business.

AN APPLICATION FOR VOLTAGE VARIABLE CONDENSERS :



Voltage variable condensers, varicaps, or silicon capacitors, depending which school you attended (I shall call them varicaps - less typing - Ed.) may be used in an unbalanced or balanced bridge arrangement, both of which are shown above, in using these configurations a much wider range of capacity variation may be obtained.

" B " is the balanced circuit of course. Bias is fed through R. Lee has measured the leakage of the type BA102, which was at -20V less than 0.5 uA, therefore R could be made anything between 500k to 5 meg. Leakage rises sharply, however at ~~4~~ -40V (PIV for all practical purposes) to 2 uA. It is unlikely though, that operation would be at the higher voltage range, because of the low capacity obtained. A large value of R will keep loading low on the tank circuit. Notice with either of these circuits there is not any hand capacity effect. The advantage of this configuration is that the RF voltage across the coil can be appreciably larger than the bias voltage, because the diodes are back to back and when one is forward biased the other is reverse biased. With this arrangement capacitance changes of 10 to 1 have been achieved, and frequency ranges comparable with the broadcast band have been covered..

With the BA102 a variation of 13 to 60pf is obtained from -20V to 0V. and with this circuit the whole range could be used, as long as the RF voltage across the coil did not exceed about 20V peak (above this the Q of the varicaps decreases) Since the varicaps are in series, the nett diode capacity values across the coil would, of course, be half of the above mentioned values.

C is indicated here to merely to show that a fixed capacitance can be used across the coil to pad the resonant frequency to the desired range. Cz is necessary if the bias voltage contains HF components (eg. if it is taken from a rectified RF source.)

SUBSCRIPTIONS continued.

Messrs G. Cannock; J. Kerr; J. Darling; R. Gunther; C. Waldon;
R. McLennan; T. Inches; M. Knott (full member); L. Pretty; J. Gelston; J. Van Galen;
L. Cooper; P. Aplin; R.K. Jaeger; H. Westerhoff; G.C. Johnston; R. Mann; B.J. Riddell;
I. Eadie; M. Healy; J.R. Stirling; H.A. Wright; G.R. Crompton; F.A.C. Richards;
R. Jones; R. Balfour; P. Chalk.

SAVE BLOWN FUSES :

The life of small glass-type cartridge fuses does not end when the fuse element blows. They make excellent formers for small V. H. F. chokes, and when pigtail leads are soldered to the ends, they may be mounted firmly as a resistor or capacitor. - W2EW.

NOTICE :

Have you something you wish to sell ? Is there some component you require which seems impossible to obtain through the usual trade sources ? Perhaps a part of a wrecked disposal unit might be the answer to your problem - why not use YOUR Bulletin to advertise ? Any queries are welcome, the charges small - use the facilities your Division offer - all this plus a fivepenny stamp and a note could make you money or save you money - give it some thought.

Thanks to VK7ZAP for the donation of a modulation transformer for VK7WI's new TX - just in case you did not know, the VK7WI TX is leaving the QRP bracket (150 watts) Officialdom says we may boost the voltage, use the present final as a driver (who said that) scrounge a more powerful tube and compete with the Mainland Divisions as far as power is concerned. No excuse now for coming on the B'cast frequency because they could not hear us - hi.

After the last one I had better close for this month