

THE WIRELESS INSTITUTE OF AUSTRALIA

TASMANIAN DIVISION

JULY 1965.

BOX 351J, G.P.O., HOBART

MONTHLY BULLETIN

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.

EDITORIAL

An Editorial is something, to the best of my knowledge, the VK7 Bulletin has never boasted before.

Perhaps the main inspiration which prompted me to write this was part of a well known and respected Federal President's Report in which he stated, "it is time we had a good look at ourselves".

I will hastily mention this remark could apply to all Divisions as well as our own.

Firstly, only two States have fulfilled their mission in reaching the target towards their contribution towards the I. T. U. Fund. One can almost hear the retort "VK7 has" - but have we? Primarily due to the overgenerous support of the few, otherwise we would have fallen far short of the mark.

Secondly, all Divisions are now confronted with the Annual embarrassment of pleading for subscriptions with little result but lots of work, especially in regards to Secretarial duties. Threats are made to cancell subscriptions of "AR" etc., etc. Is this the answer? I do not think so. Is it because the W. I. A. in general has strived for membership in numbers, rather than that of quality? Or is it a sign of the times and another example of good old Australian complacency?

There could be hundreds of answers, however, when we have lost our bands and the willing horses have died of frustration and exhaustion it will be too late.

I again repeat the theme, "Let us have a good look at ourselves."

Ted VK7EB.

MEETINGS FOR JULY

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| July 6 | North Western Zone; Lakin's Hall, Ulverstone. 2000 hours. |
| 7 | Headquarters General Meeting. 147 Liverpool St., Hobart. 2030 hours. |
| 9 | Northern Zone. Adult Education Centre, 51 York St., Launceston. 2000 hours. |
| 14 | Headquarters V. H. F. Group. 2000 hours. |
| 12 | Council Meeting. 1930 hours. |

TENDERS :

The following items are submitted for tender. The usual conditions apply, the highest or any tender need not be acceptable.

- 1 Only R. F. Amp., No 2. Suit No. 22 or No. 122 . Good appearance.
 - 1 Only No. 22 Transceiver and vibrator unit - less phones or speaker. Appears in reasonable condition.
 - 1 Only 122 Transceiver - less pwr. supply, phones and speaker . reasonable condition.
 - 1 Only AT5 Transmitter. Appears in excellent condition.
- Please forward your tender by July Council meeting.
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SUBSCRIPTIONS :

Subscriptions up to and including 18. 6. 65. Acknowledgements and thanks to the following; VK7MY; VK7ZAK; VK7NC; VK7CW; VK7GK; VK7SK; VK7CL; VK7TR; VK7ZAL; VK7JS; VK7RK; VK7ZWN; VK7ZRJ; VK7ZAX; VK7ZAG; VK7BT; VK7MF; VK7ZCR; VK7DR; VK7LR; VK7DA; VK7AB; VK7LT; VK7LD; VK7ZAC; VK7CF; VK7ZRF; VK7ZAG; VK7FH; VK7JF; VK7DW; VK7WA; ZL3BO; VK7SM; VK7ZAP; VK7ZGP; VK7DJ; VK7GB; VK7ZRG; VK7ZEC; VK7JB; VK7PJ; VK7OK; VK7YL.

R. Stranz; D. Porthouse; W.F. Dowling; S.R. Cooper; H.J. Hiscutt; A.L. Beaumont; A.I. Bedelph; R.J. Mutton; R.F. Groom; K. Wheeldon; D. Brundle; R.G. Shorthouse; L. Jacobson; D. Johnstone; R.L. Harwood; J.E. Humble; O.L. Jacobson; W.R. Maxwell; G.D. Long; N.C. Lacey; 13th. Hobart Scout Group; T.B. Berwick; R.J. Everett; G. Howard; I.F. Ling; N. Stutterd.

JAMBOREE OF THE AIR :

Last Council meeting we were graced with the presence of VK7XX. Dave is also a keen supporter of the Scouting movement and this year has the task of being the Scout Organiser for the Jamboree of the Air. The Date is October 16th. and 17th. Last year there were 22 Radio Amateurs participating in VK7 - this year we could require more. The same conditions apply - if you have already been allocated to a certain Scout Group all you have to do is advise VK7ZZ or VK7EB that you will be participating and make your own arrangements re site, requirements etc. with the Scoutmaster concerned. If you are not participating this year and have in other years or you would like to for the first time just let Ian or myself know - on the Broadcast will do. There will be a job for Associates too, they can help the Scouts as well as themselves experience wise. Let us make the 8th. Jamboree the best on record.

HAMFEST :

This is another must later in the year. It has been suggested that November 27th. and 28th. Would ALL members and ZONES please come foreward with ideas, suggestions etc. This year we propose to personally ask members - so have that idea ready or you may be asked during the round up. One can hardly blame the organisers for lack of ideas if one cant suggest any. Get your paper and pencil ready Tom - who knows you could be kept busy.

PUBLICATIONS :

The following R.S.G.B. publications are available for order, just drop Hon. Sec., a line with the necessary and you will become the proud owner of one or all these fine publications.

Amateur Radio Circuits.....	10/-
S.S.B. Equipment.....	4/-
Communication Receivers.....	4/-
R.S.G.B. Call Book.....	6 $\frac{1}{2}$ -

The last mentioned is not a World call book, however has the listing of all U.K. Amateurs - sample copies off all the above are being forwarded to the Zones.

LECTURE :

The lecture for the forthcoming General Meeting at Headquarters on July 7th. will be delivered by Ian Cairnduff of Phillips Electrical. I am sure Ian will have a keen audience as he proposes to talk on equipment and parts produced by his firm which could be utilised for Amateur Radio.

ROSS HULL MEMORIAL V.H.F. CONTEST 1964 - 1965 RESULTS :TROPHY WINNER

VK3ZER R.W. Wilkinson 5787 Points

AWARD WINNERS

Section A -- Transmitting Open

VK2ASZ	R.L. Lear	2240 Points
VK3QV	D.H. Rankin	108 "
VK4PU	J.D. Purdon	1822 "
VK5CL	H.M. Blythe	266 "
VK6LK	C.J. Kosina	1634 "
VK8KK	D.A. McArthur	4312 "

Section B -- Transmitting, Phone

VK1VP	E. Penikis	1386 Points
VK2ZFB	A.F. Birch	2220 "
VK3ZER	R.W. Wilkinson	5787 "
VK4ZLG	G.H. Lloyd	3338 "
VK5ZKR	C.H. Hutchesson	4245 "
VK6ZCN	A.L. Martin	2434 "
VK7ZAH	K.J. Hendricks	1626 "
VK8ZND	A.M. Dunn	180 "
ZL1ALN	D.A. Johnston	330 "
ZL2APC	H. Burton	340 "
ZL3AAU	J.G. Miller	950 "

Section C -- Receiving

WIA - L2211	R.C. Abernathy	466 Points
WIA - L3138	G.N. Earl	78 "
WIA - L5049	D. Deegan	1404 "

Full details will appear in July "Amateur Radio". It is anticipated that all Certificates will have been Posted to those named above before the end of June.

DO YOU ????????

1. Adjust your receiver to maximum sensitivity and listen before "belching forth" on the frequency?
2. Turn on your carrier without modulation and proceed to practice CW with a hammer on the work bench or worse sound like Steptoe and Son gathering their junk from the yard - that is with the modulator on of course.

If the cap fits wear it - next time it might not be in the Bulletin but on an official memorandum.

TECHNICAL

This months article is not about a football match but something worth serious consideration when designing that next power supply. As there is more than enough for one issue the article shall be serialised like a " who done it " so you may have to wait for next months bulletin to see how you might murder that little diode - hi (Ed.)

HALF WAVE VS. FULL WAVE

BY

R. L. Gunther.

A half wave rectifier is a simple way to obtain d.c., but it has some drawbacks. Since load current is always passing in the same direction through the secondary winding of the power transformer, the core becomes saturated at a lower current. This means that for a given load current you need a bigger transformer. If you dont increase its size you will find that voltage regulation will be poor for heavy loads, and the transformer may get hot. The amazing fact is that you can obtain about 50% more power from a transformer feeding a bridge than a half wave rectifier. The centre - ~~XXXX~~ tapped full wave configuration is only slightly more efficient than half wave, because current through each secondary half still flows in only one direction, but it does provide twice the ripple frequency and twice the output current for a given secondary wire.

For light loads it will not matter much what configuration is used, and half wave is a simple method for getting d.c. from an untapped winding; as long as low current is drawn, reasonable regulation and ripple factor can be obtained without using too g gigantic a filter condenser. Excellent regulation and/or ripple reduction can be obtained by using an additional transistor regulating stage of the conventional emitter - foll - ower design.

Half wave rectifier circuits ought, however, to afford a somewhat greater safety factor for PIV rating of gaseous valves or silicon diodes (germanium orsilen - ium not as critical), than would be the case for any full wave circuit. The reason is rather interesting. In a full wave circuit, either the whole secondary or half of it (depending on circuit used) is loaded on each cycle, and this tends to damp the more severe transient overvoltages that can arise from several causes. In a half wave circuit, however, the secondary is altogether unloaded on half of the cycle, and since it now feeds a high impedance the transient voltages across it can rise to awful levels. The cure for this is to use a somewhat greater PIV safety factor and better transient suppression. For a diode in a full wave circuit a safety factor of 1.5 over the nominal peak reverse voltage across the diode is usually (hi) sufficient. In a half wave circuit I should advise a factor of 2, particularly if a heavy load is to be drawn. If a Silicon Controlled Rectifier is used, a safety factor of 2 is minimum, as far as I am concerned, because their switching action is violent, and SCR's are not cheap.

TO BE CONTINUED NEXT MONTH.

V.H.F. Notes.

The Annual General Meeting of the V.H.F. group was held at the Liverpool St club rooms on the 19th. May 1965. The following office bearers were elected for the forthcoming year,

President	VK7ZZ
Vice Presidents	VK7ZAS, VK7ZMK
Sec/Treasurer	VK7TX
B'cast Officers	VK7ZJG, VK7LL
News Officer	VK7TX
Activities Comm.	VK7ZAX, VK7KZ, VK7ZMK
Research Officer	VK7ZAS
V.H.F. Scribes A.R.	VK7ZAQ
Bulletin	B.J.RIDDELL

It is noted here with interest at the number of VOLUNTEERS??? for the above positions.

The Sunday morning broadcast is now being relayed in the Hobart area on 52 Mc/s and a callback is requested at the conclusion of the 144 Mc/s roundup, which brings to mind another point chaps, the roundup on Sunday mornings and the chin wag on Sunday nights has been lagging a little the last month or so -- lets see what can be done to rectify this position eh?

The mid - season DX on 52 Mc/s is due to begin early in July so keep the rig warmed up. and don't forget you Northern chaps we would like to hear of any interesting openings (or otherwise) during this period and at all other times, the address to forward any information to is

B.J.Riddell 53 Riawena Rd. Montague Bay Hobart.

We also extend congratulations to Mike Hooper who has the call sign VK7ZMC and Mike can be heard and worked at the moment on 2Metres.

B.J.R.

