

THE WIRELESS INSTITUTE

OF AUSTRALIA

MONTHLY BULLETIN.

Tasmanian Division.
Box 851J G.P.O.
HOBART.

AUGUST 1961.

PRESIDENT.

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TREASURER.

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

GENERAL MEETING.

The next General Meeting of the Tasmanian Division will be held at the Club Rooms, 147 Liverpool St. on Wednesday, August 2nd. at 2000 Hrs. Visitors will be welcome, as always.

LECTURE.

The Lecture this month will be given by Mr. A.H. Morrisby, and is entitled "Basic Receiver Design." This subject is always an interesting one, and this one by Alan will prove no exception and no doubt will assist those Members who are interested in constructing one of these days the "receiver to end all receivers". Haven't a long-range weather forecast for this night, but it shouldn't be too cold (I hope) so come along and bring a visitor as well.

V.H.F. GROUP.

On August 16th. next the V.H.F. Group will hold its next meeting. Last Meeting a vast collection of equipment was assembled- the place looked like the annual auction. Chief amongst it was a c.r.o. and marker generator and noise generator with associated equipment. Receivers, supplied by VK7's MY, EJ, ZAK, ZAV and ZAO were put through their paces. A number of weird patterns were obtained of uncertain significance. Noise figures of 7 Db. were measured from 6ES8 Cascode stages and $3\frac{1}{2}$ Db. for VK7ZAO's 2Mx 6CW 4 Nuvistor set-up. (Refer V.H.F. Handbook page 206, Bryan).

Local News.

6 Mx. On Saturday 8th. July, many were caught unexpectedly by an opening to VK2, VK4 and VK5 extending from 1100 hrs. to 1900 hrs. Conditions would rank along with the best of the season's with sigs. over S9 even on a dipole. A repeat performance was staged on Tuesday 11th. with VK5. Activity, as might be expected was down. M.U.F. reached to around 90 Mc/s, but a search on 2mx. by VK7ZAI, 2ZCF and 5ZDR proved negative. The local ambulance network reported reception of Newcastle Police (85 Mc/s) and a picture was seen from ABN2 until the local station fired up.

A good pointer was the appearance of 25 Mc/s teleprinter harmonics. NOTE PAY PARTICULAR ATTENTION AROUND AUGUST 4th.

2 Mx.

This band has been showing the best form recently, best night to try being Sunday when around 8 stations operate. We believe 3 well-known lower band operators are considering its use. (No names!) A call sign, heard again on 144.54 Mc/s after an absence is VK7JD, Tiny Dore.

Rigid skeds between Hobart and Launceston seem to have been dropped at the moment, unless notified differently. Southern stations continue to keep a close watch at all times, particularly between 1950 and 2000 hrs., Sunda ys.

A contact saws made between VK7ZAO and VK7PF at Evandale on July 2nd sigs R5 S6-7. Sigs were fairly constant with slight QSB. (Fade, Ed.)

Signals have been heard constantly ? sorry, consistently, aech week and it seems some sort of contact would be possible at most times. Interstate.

Two meters is in the news at the moment. VK4' have been heard in VK3 via sporadic E propagation- seems this band may be it next season. VK4ZAX, a well known 6 mx. operator, is using a parametric amplifier and SSB transmission on 2 mx.

VK4ZAA works 150 miles using 522 eq uipment both ends. VK5ZDR in Adelaide works VK3NN (25 0 miles) every night of the week. VK3AAU expects to get an E.R.P. of 10 Kw. without exceeding the limit.

The foregoing V.H.F. Notes compiled and signed by R. Emmett VK7ZA0.

S.W.L. GROUP.

Last Meeting. 6 Members attended this Meeting which was devoted, for the better part, to business.

It was suggested by the Secretary, Mike Jenner, that there be a re-election of Officers.

A motion was put forward by R. Rogers that owing to the Number present the election should be held in November. This was seconded by N. Fisher.

Michael Williams, one of our new members, suggested that we should have a demonstration on building gear and testing same at one of our future meetings.

In connection with this we have received offers of parts for building H.F. converters from VK7LE and VK7CT and one other whose name I do not know. The senior members will, of course, also have a scratch about in their junk boxes. Any offers of gear will be gratefully accepted, either of complete converters, of which there must be many not in use, or parts to build some with an I.F. of 1600 Kc/s.

Next Meeting.

As was the case last month we have nothing definite planned for the next meeting but members will be notified via VK7WL as soon as the Lecture Committee has arranged something.

Listener's Reports.

My plea last month has borne no fruit and at the time of writing

I have not received any news. I REPEAT. PLEASE WRITE and let me know what YOU are hearing, what you are doing and what you know of the activities of other S.W.L.'s in your vicinity.

Interstate News.

Very little has been heard of mainland activities. Neville Fisher writes to Maurice Cox in Victoria and read one of Maurice's letters at the last meeting. Maurice writes a very interesting letter and would like to hear from other VK7 S.W.L.'s. His address is in "A.R."

(Signed) Mike Jenner. Hon. Sec.

S.W.L. Group.

(Mike also sent a Technical article on building a H.F. Converter but I will keep that one until next month. Ed.)

NORTH-WESTERN ZONE.

The Annual General Meeting of this Zone will take place in Lakin's Hall, Ulverstone, on August 1st. at 2000 hrs. Zone Members are requested to be present.

The last Meeting of the Zone went off very well and the auction was still going strong at midnight. The Lecture on S.S.B. by Ken Saxton proved very instructive, as anticipated.

IMPORTANT.

The Burnie Ambulance Brigade is now in full operation but are desperately short of operators, and YOUR help is needed. A licence is NOT required to operate this station so Associate Members can be in it as well as Full Members. Remember that the more operators there are the longer will be the time between your period on. BE IN IT.

NORTHERN ZONE.

At time of writing no information but guess that the Meeting will held on the usual night somewhere or other.

The Division has received from the Hon Secretary VK2 S.W.L. Group a very well done reprint of the AR7 R.A.A.F. Receiver. This manual is available to all W.I.A. Members at 10/- plus postage if applicable and is obtainable direct from the Hon. Secretary VK2 S.W.L. Group Mr. D.G. Allen WIA-12215, Box 1734 G.P.O. Sydney. It is anticipated that other popular disposals equipment will also be available in similar form in the near future. When this is to hand you will be advised in this Bulletin, in the meantime any one who wants the dope on the AR7 can't do better than to purchase the manual now available.

GEORGE TOWN RADIO CLUB.

This Club, under the able leadership of George, VK7GC is getting under way and the Boy Scouts in the area, as well as the young lads who are not Scouts are very keen on radio as a hobby. An urgent requirement at moment is a multimeter, in or out of order. If YOU have one of these articles that you wish to donate to the club, then George will be very pleased to hear from you.

CAREERS AND HOBBIES EXHIBITION.

The Hobart Junior Chamber of Commerce intends to conduct a Careers and Hobbies Exhibition in the City Hall from 5th. to 9th. Sept. inclusive, from 11a.m. to 10 p.m. each day. The Institute intends to arrange an exhibit for which purpose a sub-committee was formed at the last General Meeting. Final details will be worked out at the next General Meeting, so if YOU have any ideas and/or able to assist in this project then we will be very pleased to hear from you. We are going to do it and want something worth while, especially as quite a lot of good publicity can accrue from such an exhibition.

JAMBOREE-ON-THE-AIR.

VK7's AB, JB, ZZ, SF, KA, and ~~the~~ members listed last month have volunteered to be in it this year. The V.H.F. Group hopes to be able to arrange a V.H.F. link between stations, at least in the Southern area. VK7JB at least will be portable. The time again is October 21st. & 22nd. Won't be long before that is here either.

REMEMBRANCE DAY CONTEST. 1961.

The Contest this year will be held on 22th. and 13th. August. If you want Tasmanian to retain the Trophy this year then it is up to YOU. Get on as long as you can and work as many stations as you can, you are guaranteed a lot of fun and you will meet again some of our fellow amateurs whom we only seem to contact once a year, during the R.D. Contest. VK7WI will be in operation definitely on Sunday morning from 1000 to 1200 operator VK7AL? (not the first time that Tom has used that call) and volunteers for other times are needed. If your own rig isn't in going order then arrange to go along to VK7WI or to your nearest active station and at least work enough to put in a log. ALSO DON'T FORGET. After taking part in the Contest, for Pete's sake send the log in. Your efforts are wasted without it. Good luck in the Contest and hope that conditions are kind to us this year.

FEDERAL CONVENTION.

The next Federal Convention will be held at Perth. W.A. next year. In the meantime if you have any items which YOU want considered at this Convention NOW is the time to let us know about them. At present we have three items, one from the Northern Zone and two from the last General Meeting. At the last General Meeting it was proposed that Limited Licencees be allowed to use 28-30 Mc/s. Also, that Limited Licencees be allowed to operate C.W. on their licence bands on passing a 5 w.p.m. code test. Once again, if YOU want something done which you think will further the interests of the Institute write and let us know, N O W.

SECOND ALL ASIAN DX CONTEST.

Your attention is drawn to the fact that this Contest will be held from August 26th. (1000 hrs) to 27th. August (1600 hrs) both times GMT. Rules are published in "A.R." for July 1961. CW only but is good fun notwithstanding.

OVERDUE SUBSCRIPTIONS.

Owing to the fact that 28 members this year omitted to pay their just dues it has been found necessary to delete said 28 members from the Circulation List for "Amateur Radio". It is hoped that these members will do the right thing and pay up but, in the meantime, no "A.R." This number of deletions makes a bit of a mess of our membership figures, down to 142 on the last List but we hope that this low figure is only temporary. If anyone asks you if you have received "A.R." and they haven't then ten to one they haven't paid their sub. Ask them to send it forthwith.

This Bulletin.

In response to a request a few General Meetings ago for a volunteer to assist the Secretary, a newly joined Associate Member, Mr. Eric Grainger has volunteered to assist and will in future be the Bulletin Editor. It will now be necessary that all copy for inclusion in the Bulletin be in the hands of the Secretary on or before the monthly meeting of the Council, which, in case you have forgotten, takes place on the third thursday in each month. So you will help your new Editor, printer, composer author and copy boy by making sure that this is done. Also technical articles are still required, not only for this Bulletin but also for "Amateur Radio" if you will make the effort to do something about it. NOW please.

TECHNICAL.

AUDIO FREQUENCY RANGE FOR AMATEUR PHONE WORK. (Continued).

If the valve is a triode then the reactance of the condenser at 300 cps must equal R_g plus (R_l and R_p in parallel)

$$\text{i.e. } \frac{1}{2\pi f_0} = R_g \text{ plus } \frac{R_l \text{ plus } R_p}{R_l \times R_p} \quad \therefore \text{the moral is, stick to pentodes.}$$

However, in most cases the formula

$$C \text{ equals } \frac{1000}{2(R_g \text{ plus } R_p)} \text{ will be near enough.}$$

For a typical high mu triode this would work out at something between .0015 and .002 uf. and either would be OK. This would also not be too far off for a low mu triode.

High Frequency response. This is tailored by shorting condensers from plate to earth in these two stages. In the pentode case the reactance of this condenser at 3 Kc/s should equal R_g and R_l in parallel.

$$\text{i.e. } \frac{1}{2\pi f_0} \text{ equals } \frac{R_g R_l}{R_g \text{ plus } R_l}$$

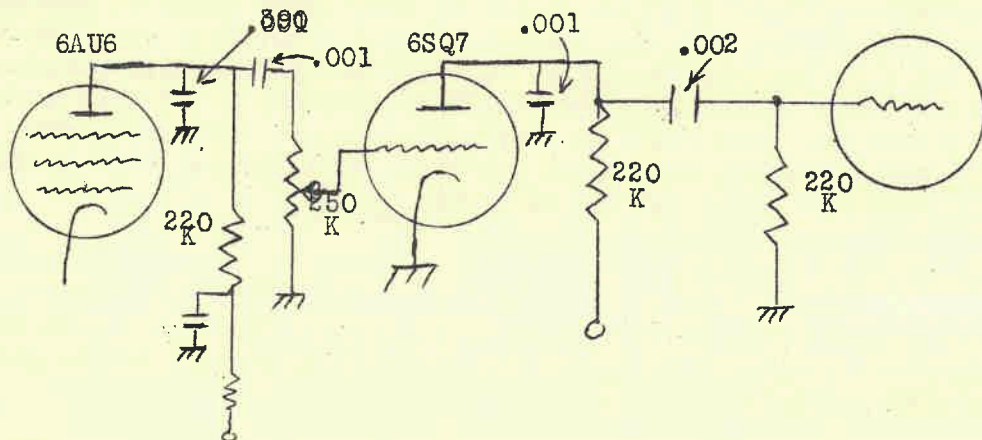
This works out to C_p equals $50 \frac{(R_g \text{ plus } R_l)}{(R_g R_l)}$ in uf.

For the previous case this would be 400 pf.

For the triode case the reactance of the condenser would have to equal R_g , R_l and R_p all in parallel.

For a typical High mu triode the value would be about .001 uf. and for a Typical low mu triode it would be about .008 uf.

A typical circuit then would be



And here is a quick one from the VK5 Bulletin. If you have a slipping dial cord, dissolve a small amount of resin in alcohol and then paint the solution on the cord. The alcohol will evaporate, leaving a thin layer of resin, which prevents slipping.

Well fellows that is it for this month, next month you should have a new Bulletin Editor and it is up to you to see that you send me the information you want publicized in time for inclusion. Good luck in the Contest and maybe I will see you on the air from time to time.

Cheerio and 73

K. E. Millin. Hon. Secretary.