

A MATEUR

QRM

RADIO

Bulletin issued by the North, Northwest
and Southern Branches of the Wireless
Institute of Australia, Tasmanian Division.

SEPTEMBER 1978

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P.O. Box 275
Launceston
Tas. 7250

MEETINGS

Northern Branch - 34 Bourke Street - 8/9/1978 - 7.45 p.m.
Northwest Branch - Lakins Hall, Ulverstone - 12/9/1978 - 8.00 p.m.
Southern Branch - SSS Rooms, Melville St. - 6/9/1978 - 8.00 p.m.

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QRM COMMENT

The "RD" contest has come and gone for another year, but what a contest! It's a long time since I've worked a contest where people sounded so enthusiastic. I wouldn't be surprised if every licenced VK5 were on the air. Activity was very high from other areas. A lot of the credit for this activity must go to our novice members - some of their scores were incredible, operating techniques good, and in the CW section they did their bit too. The NW boys really got organised on VHF - and the scores should embarrass a few of the HF fellows. To all who took part and sent in logs, thank you. Now for the bad news. A lot of members who could have got on the air for a short spell didn't even bother - and some of the excuses were pitiful. Even if you don't believe in the original concept of the RD contest - it's good for the name of the State - Tasmania.

With this issue a registration form for TARC-1978 is included. We hope that everyone will attend. A lot of effort is being expended by our Southern friends in organising this Hamfest. Let's make it a success. Any NW member is invited to camp or sleep "under the stars" at QTH of 7000 en route.

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NORTHERN BRANCH NOTES

Maurice VK7JU

The meeting night of 11th at Northern Branch rooms was one of the wettest nights this year and attendance figure of 22 was a direct result. Despite Billy (VK7TE) valiant efforts at keeping the drains cleared, 6 inches of water remained at the main door - members had to use the "tradesmans entrance" hic. Minutes of the previous meeting were read and passed - correspondence and accounts were dealt with. With QRM being sent Statewide, Mac VK7CCC has requested an assembly night set down for 4th September and helpers are required at the rooms for approx. 2 hours on this date. Reg VK7KK advised that the Wine and Cheese tasting night has been arranged for 23rd September at McIntyre House - please keep this date in mind - tickets are \$5. We want support for this night - please contact the following for tickets - VK7s - JG, IC, KK, ZRF, HE, KK, ZBY or their respective XYC's.

Peter, VK7PF addressed members briefly on the RD contest and called for an all out effort by members - it was therefore pleasing to hear later on the contest old and new calls participating on SSB and CW-FB chops.

Members are busy organising displays and equipment for the Jaycees exhibition being held at the Albert Hall weekend 24th to 27th August. Reg VK7KK has called for more assistance in manning the roster.

Our guest speaker for the meeting night failed to appear, possibly due to the adverse weather, so the remainder of the evening was devoted to drinking coffee and chatting between members - an excellent pastime it seems.

A welcome addition is a new member XYL - (Mrs) Lucy Lockett who is currently studying for her licence - best of luck Lucy.

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North West Notes by Jim VK7NOW

The August meeting was held at Lakins Hall Ulverstone on August 8th and was attended by some 32 members which was excellent considering the extremely wet night.

Minutes of the previous meeting were read by the Secretary.

Correspondence

Inward - A letter from Council was read confirming the use of the call sign, VK7WI for the "R.D." contest.

Treasurer's Report was read by Ivan VK7ZOA/NOA, and included accounts which were passed for payment.

Council Report was given by Paul VK7ZPB. It was suggested to arrange an Insurance Policy to cover members taking part in Exhibitions, Erecting Antennae, etc, in case of injury, loss of work, etc.

Activities

The main activity is of course the R.D. Contest. During the contest, VK7WI will be operating portable from the Qth of Tony, VK7AX.

Later Note We are pleased to advise that at least 25 N.W. members took part and some very high scores were obtained. It is hoped that VK7 could take an award this year.

Joint-Activities Officer Shane advised that he was joining the "Grey Funnel" Line in Communications. Shane was thanked for his work on behalf of the Branch by the Chairman - carried by acclamation.

Q.R.M. Is now circulated State wide. Members are asked to submit articles hints, tips, circuits etc.

If any member is troubled with ignition "QRM" in their car, Ken, VK7KH, has an easy way of doing it. A much cheaper method - and 100% successful - was devised by Graham VK7ZAQ and Jim VK7NOW.

General Business and Topics

Applications for membership were received from Donald G. Findlayson of Wynyard and Stewart E. Madigan of Devonport. Both applications were carried unanimously.

The tender for the MR20 was accepted from Stephen Russell.

Cliff, ex VK7CD, is now VK4ACD.

Ivan, VK7ZOA, has constructed a very successful minicomputer.

T.A.R.C. 1978 is to be hosted by the Southern Branch this year - date is long weekend in November.

So you think you've got a decent antenna? The "Wireless Bird" tells us that Doug, VK7AZ, is currently putting up a 20M Monobander. The specification? A mere 90 feet high with a 40 foot Boom. Sort of dwarfs your scribes DX-33 "Penetrator".

North West Notes cont.....

Silent Key It was noted in the minutes the passing of Doug, VK7AB, one of the Pioneers of Amateur Radio in VK7.

Max VK7MX concluded the evening's meeting with a very informative discussion on Hints and Tips for working the "R.D." Contest. He put his advice to good use because Max finished up with a very good score, despite his TH3 beam developing a fault at zero hour. Not to be thwarted, he "whipped" up a 20 metre Dipole very quickly and received S9 reports from many states.

And finally your scribe was told - by another novice operator in the R.D. Contest - " You've taken my frequency OM !" Well!!!

That wraps it up for another month. Good DX. VY73 Jim, VK7NOW.

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DOWN UNDER NEWS (i.e. SOUTHERN BRANCH NOTES)

There was a good turn up with 30 people at the Southern Branch meeting on August 2nd, including Colin Walker from the Scout Association. Colin gave a talk on the forthcoming J.C.T.A. The 10 metre rebroadcast by 7 AK is going well - have a listen. Applications for membership were accepted from Gordon Burnett VK7NRB, and Maurice Potter VK7NSA - welcome to you both. Greg 7FT gave a report on TARC78 - a tape will be available soon and inserts in QRM, so keep an eye out.

Peter 7ZPA asked for the raffle to be drawn, that was all he came for!

Results:	1st	L. Krause
	2nd	G. Warwick
	3rd	D. Riseley
	4th	J. Gelston

Congratulations to you all and thanks to all people who sold tickets. The money raised will help keep the registration fee of TARC 78 down - out of interest the North sold 19 tickets of 50 allocated, North West 39 of 50 and South 181 of 200.

Wine Bottling

Saturday night, 5th August, and another very enjoyable WAGS function was held at the QTH of 7RR. Moselle and Fort were bottled, spilt and drunk, along with a lovely spread of food.

One person who wasn't there was Ron VK7ZRO, but he made up for it by transmitting ATV pictures to 7RR's QTH. For those who didn't know what Ron looked like it was quite a shock. We had a tour of his station, via TV, saw his Bench, Ron, his VDU, 3 phase power input, Ron, some half empty bottles, some lights, some empty bottles After the tour, Ron set up some video games - mainly a moon game - we all crashed into the moon.

A lot of fun - thanks to Brian, Ron, Andrew and all the WAGS. We look forward to the next function.

de Andrew VK7ZAJ

FROM WAGS

On Saturday August 5th, the Womens Auxiliary Group, Southern Branch (WAGS) held a very successful wine bottling at the home of VK7RR and VK7NSU/ZSU (Sue and Brian Morgan). A 200 litre drum of Brown Bros. Milawa Moselle was bottled, along with 30 litres of port. Bottling began at 7 pm and concluded around 10.30 pm, and was followed by a delicious supper, including home-baked bread with a selection of cheeses - and, of course, Moselle.

Many thanks to Ron, VK7ZRO, who kept the bulk of the onlookers entertained with computer games and other video delights via 70 cm ATV. His transmissions lasted for about 5 hours, and gave VK7RR an opportunity to test his ATV gear.

This function was another in a series of very successful social events which the WAGS have organised. They are now busy planning for the non-technical side of the forthcoming Tasmanian Amateur Radio Convention.

* * * * *

Q.S.P.

Bruce Bathols VK3UV, EDITOR of AR will be attending this years TARC - Hamfest. It looks as though Bruce will be taking a holiday with his family to take in the beauty of Tassie and the pleasure of our Convention.

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SOME CHOICE GOSSIP

I heard that the convention committee had another really late meeting the other night - they didn't get home till after midnight. Anyway the inside info. is that they have booked the student union area at the Mt. Nelson T.C.A.E. for the convention - must be the best radio site around Hobart, for certain.

Well, it seems they've got more than the usual activities organised. And I just can't wait to see all that new commercial equipment, plus the home brew as well. You'd better bring yours along too. I hear some people are going to bring computers! The best thing is going to be the tucker - you won't want to be late for this, The caterers are already planning the Saturday evening dinner.

If you're going to the W.A.G.S. Sunday lunch, you'll need a special permit to break diet. Remember the W.A.G.S. seafood night - I didn't need to eat for 3 days!!

There's no doubt about those W.A.G.S. - they get things organised - including a creche for children and a range of activities for ladies. Well, it looks good from here. Better get your fox-hunting gear ready. See you at the convention.

Psst....One thing before you go - there's a special rate for families.

Sporadic E.

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ATV - SIMPLE AS ABC - PART II

Bob, VK7ZRF

Continuing on from last month we have a few more circuits of the simple vidicon camera.

The tube requires magnetic as well as electrostatic focus and the former is normally found as a solenoid surrounding the tube and deflection coils, through which is passed a fixed, adjustable current. This is adjusted in conjunction with the electrical focus for best resolution.

This particular coil requires approx. 100 mA so a small power transistor (IC. 1A) is sufficient. The polarity is important; a compass can be used to ensure a North pole is at the tube face. (unlike poles attract). Fig 1a.

Since mixed blanking was available in my S.P.G., a simple circuit was found satisfactory to cut off the vidicon beam during retrace periods. Driven by a T.T.L. level negative going signal, the cathode rests at near earth potential and is driven to almost +12V thereby cutting off the beam (Fig 1b).

The focus (electrical), target and beam control circuits are straightforward potential dividers; all small components being mounted on the pads or small tag strips (Fig 1c and 1d).

The focus regulator components were mounted on small (5 lug) tag strip.

By far the most time consuming circuit was the field oscillator and output section. Again a unijunction, TR1, was used but since a sawtooth waveform is required this time (the inductive reactance of the field coils is very low at field rate), more elaborate feedback circuits are required.

The timing capacitors are split and a sample of the emitter voltage from TR2 is fed back to the junction to modify the exponential wave form that is normally the result. The ten Kpat is for frequency adjustment while the 2K and the 500 ohm control the output and linearity.

My coils required approx. 5 volts and this proved difficult to obtain with good linearity. When a BC337 is used for TR3 some parasitic output may be present, in which case CX, 100PF may have to be installed.

(To be continued)

Ref: "AR" June 1978

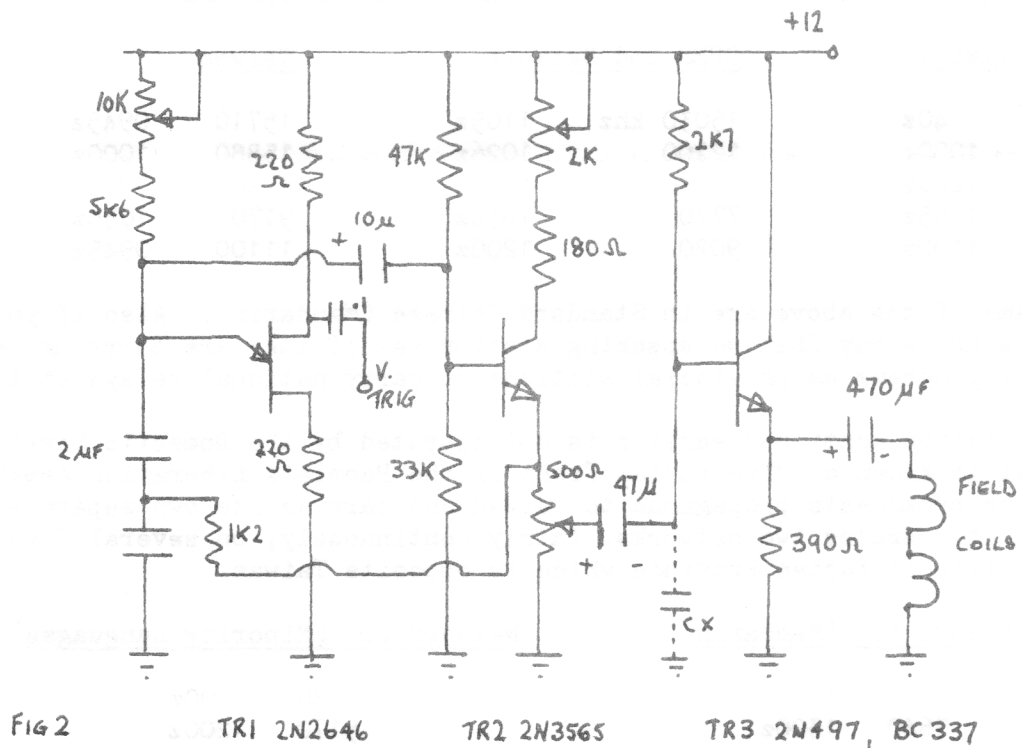
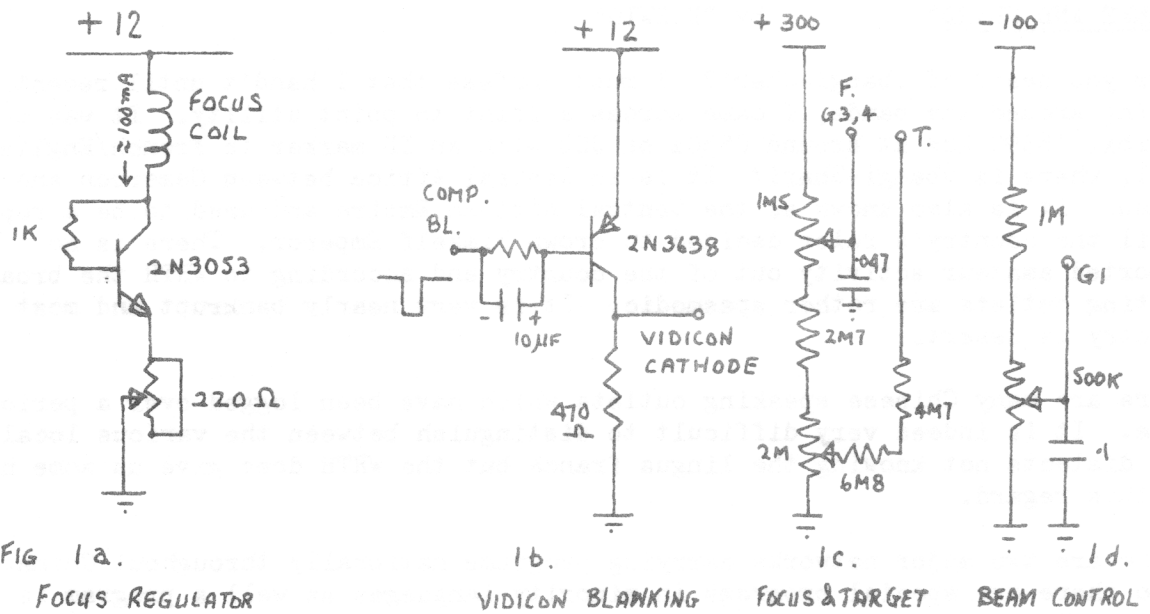
73's Bob VK7ZRF

See Page 7 Circuit diagrams.

FOR SALE

Standard C6500 - Wadley Loop communications receiver - 0.5 to 30 Mhz - NEW - \$275
Ph. 003/317914 VK7NAB

YAESU - 221 - all mode 2 metre transceiver - separate digital readout - had little use - \$640 o.n.o. VK7CCC



"SCENE AND HEARD"

by "EARWIG"

Have you heard of Ubangi-Shari? I must confess that I hand't until recently when, tuning around the bands, I came across a point to point utility. It was on approx. 16390 khz at around 0530z on USB with an ID marker in French/English. Well, where is Ubangi-Shari? It is in Central Africa between Cameroun and the Sudan. It is also known as the Central African Empire and used to be a republic until the country's ruler decided to crown himself Emperor. There is no reported amateur activity out of the country and according to WRTH the broadcasting outlets are rather spasmodic. It is very nearly bankrupt and most of the country is desert.

There are many Chinese speaking outlets which have been logged over a period of time. It is indeed very difficult to distinguish between the various localities and dialects not knowing the lingua franca but the WRTH does give us some help in this regard.

There are two major networks carrying programs nationally throughout China. Also there are special programs in minority languages as well a program is also sent to Taiwan. As well as the Central People's Broadcasting Station (the name of the National Network) there are two networks operated by the People's Liberation Army in Fujian Province. However, more about that later. Here listed are the frequencies of the two networks logged here in Tasmania.

<u>CPBS 1st Network</u>		<u>CPBS 2nd Network</u>		<u>Taiwan</u>	
6665 khz	1240z	15030 khz	1105z	15710	0945z
9080	1000z	12200	1026z	15880	1000z
6750	1240z	11040	1045z	6790	1235z
11290	1255z	7770	1030z	9170	1055z
7095	1100z	9020	1200z	11100	0945z

All programs of the above are in Standard Chinese (Mandarin). Also if you do come across any stray Chinese speaking station see if they are carrying any of the Network programs as provincial stations do carry national relays at times.

The other Station mentioned earlier is not operated by the Domestic Service but by what is known as "The Fujian Front of the People's Liberation Army". This station broadcasts propaganda to Taiwan and carries its own separate programs. It operates two networks, fairly continuously, on several frequencies from facilities in Fujien Province which is opposite Taiwan.

<u>Network 1. (Mandarin)</u>		<u>Network 2. (Minority Languages)</u>	
3535	1300z	4380	1100z
3640	1300z	5170	1200z
4045	1130z	5900	1300z
5265	1230z	7025	0945z
6765	1100z	7285	1040z

JJY, the Japanese Time signal, is now been heard on 8.000 Mhz at 1300z with time Pulses and its usual ID every 10 minutes. Some Qrm noted.

Radio Reloj Contintente, Caracas, Venezuela heard at 1000z on 5030 khz in Spanish. Well, thats all for this month.

73 de The "EARWIG"

* * * * *

DX AND THE AMATEUR BANDS LF - HF - VHF

Oscar

As we've said before DX is where you find it.

An informative QSO with Bill VK9ZM brought out several items of interest; Bill will be on 1.8 mhz towards the end of September and mentioned that the VK4's have a net on 1.824 mhz Sundays at 1000z. VK's have recently worked FK8, H44, VK9N1 and ZL's on this band and with the equinox coming up W's, JA's, KH6's etc. will be looking our way, listen around 1000 to 1100Z.

VK7NAB has been burning the midnight oil on 3.5 and with his 20 watts has QSO'ed 9M2, DU, YB and YC's on SSB around 1630Z, Allen advises that the YB's are looking for VK contacts at this time.

7 mhz is worth watching between 0600 and 0730Z, stations from C31, CE, CP, DL, F, GI, GW and HB have been logged whilst the W's and JA's are there in abundance later in the day (most of the above were on SSB)

14 mhz - Still carrying the bulk of the DX, however techniques are changing and a lot of the more unusual DX is being heard in net operations, P29JS has a net on 14.220 mhz daily at 0700Z (you want to be on frequency at 0645Z) and during the month many rare countries have been heard, some of which were C5AAP, CT3BM, EA8's in abundance, EL2ET, TU9GA, 5T5CJ, 5U7AG, 7X2CW, 9G1JA, 9G1J1, 9X5NH, ZP5PX, KA1NC, C21EF, also CO, HBA, H44, 9H. Many of these stations check in regularly.

8P6AH in Barbados hosts the Carribbean net on 14.175 mhz at 1000Z daily and for the rarer Central American country hunters this net can be a winner.

At the time of writing these notes Sable Island is being activated by VE1MTA but he does not appear to be terribly interested in DX, he was copied here at 1100Z on 14175 mhz but in spite of being told by VE's that a couple of VK's were on frequency he went QRT.

Amsterdam island is still putting good signals into VK and both FB8ZM on SSB and FB8ZN on CW are often heard during our evenings, South African stations are also re-appearing, FR7BE was audible here at 0430Z 56 on SSB whilst ZS's are occasionally being heard - try both long and short paths.

21 mhz - An ever changing band, the usual African stations although still workable from 0500Z are not consistent and usually have only weak signals, however on the 20th FH8CJ was QSO'ed by VK7's. Europeans have been QSO'ed on several mornings from 2200Z until as late as 2359Z and VE3BWK/4X a peace keeping forces station comes through at 0500Z. This station is in Israeli occupied territory in Syria - Wot country? If one has the time its a band well worth watching and will certainly improve.

28 mhz - Mostly JA's and W's but here again the 4X4's put in good signals on the odd days, however I've had no reports of the more unusual DX being heard.

52 mhz, VK9ZM on Willis Island is monitoring 52.050 mhz and also listens for VK7RNT, here's your chance to get a new country, BUT! you will have to QSO Bill before he leaves the island about the end of November.

144 mhz is also being monitored on 144.1, both Townsville and Ingham have already been QSO'ed on FM and SSB by VK9ZM, Bill has plenty of power available together with a 10 element yagi, X'ed yagis and both horizontal and vertical polarisation is used. 432 mhz and Oscar will also be available from the end of September.

DXPEDITIONS

CHATAM ISLAND 26th October to 7th November. Full details next month.

MELLISH REEF. Now due to commence on the 27th September - 2 stations, 24 hour operation, 9 days, 30,000 QSL's all ready for the lucky ones - good hunting.

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SHACK CLEARANCE

7	- Vidicon tubes Toshiba 8844 from Sony AVC-3200CE Camera.	\$8.00 each
1	- 14 Element 2 meter Sun Bandpass Yagi Kit. New.	\$40.00
1	- 5 Element 6 meter Yagi	\$20.00
1	- 10 Element 2 meter Yagi	\$20.00
1	- 2 Meter Valve Converter	\$10.00
1	- $\frac{3}{4}$ Built tuneable if Receiver with 6 meter and 2 meter converters. Large Eddystone dial. Solid state.	\$75.00
1	- Weston carphone low band	\$15.00
1	- Pye carphone low band	\$20.00
1	- TCA carphone 2 meter 25 watt with 4ch switch fitted with CH A, B, 4.	\$30.00
1	- 6 meter AM Transceiver XTAL locked TX, tuneable RX	\$45.00
1	- 2 meter AM Transmitter with modulator final QQR03/12	\$40.00
	Limited number 23Ch AM C.B. Transceivers. Good value for parts etc.	\$58.00
1	- Kyokuto VHF 2 meter Transceiver	\$300.00
	NOTE: Scanner, Amateur Radio April 78 144.000-147.990 mhz	
	POWER SUPPLIES 13.8V 2A continuous	\$36.00
	13.8V 3A continuous	\$42.50
	13.8V 4A continuous	\$49.80
1	- Yaesu Musen YP-150 dummy load/wattmeter	\$109.00
	ME-11X twin meter SWR/power meters 150 mhz 100watt	\$29.50
	Vodac microphone compressor modules with hardware volume control etc.	\$26.00
	Daiwa FD-30LS low pass filters 100w/200w max.	\$20.00

Many other items of equipment and accessories available in stock

Graeme Thomson VK7ZGT

G.T. Electronics, 131 Westbury Rd. Ph 444773

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STATE NEWS

from Reg Emmett, VK7KK

NEW MEMBERS

Welcome to the following,

Lucy	Lockett	Prospect Vale	Grade B
Gordon	Burnett	Risdon Vale	VK7 NRB
Maurice	Potter	South Arm	VK7 NSA
Stewart	Maddigan	Devonport	Grade B
Donald	Finlayson	Wynyard	Grade B

It is very pleasing to note that only one A Grade member has decided not to renew their subscription this year. Thanks to all for your support.

INSURANCE

The Division has entered into a Public Liability Policy with the A.M.P. Society. It covers all Institute activities for a sum of \$500 000, the premium being \$32. A copy of the policy will be forwarded to Branches in due course.

Before completing a Personal Accident Policy Council would like to hear members' views. The cost of the policy being considered is a significant part of your subscription so your opinion in favour, or against the idea is sought. All activities of the Institute would be included, eg meetings, field days, WICEN activity, tower erecting etc. and it would apply to all members. Benefits are,

On death or total disablement	\$20 000
Partial disablement	\$10 000
Temporary disablement	\$200 per week (or 80% of normal weekly income)
Medical Expenses	\$400

The premium would be \$1 per member (ie around \$300 at present)

Comments please to Council members (7ZZ, 7GD, 7MC, 7PF, 7ZBY, 7KA & 7ZPB) Southern members should note that this policy would replace that held by them for workers on the Mt. Wellington Tower.

NOVICE EXAMINATIONS

P. and T. Department in Hobart have advised that it will be possible for those living more than 80 km from Hobart to sit the November Novice Examination in centres outside Hobart. It will be necessary for you to place your application for examination by the usual date but specify the place of examination required. It is possible that examinations will be held in Launceston and on the North West around two weeks after the Hobart exam in the evening.

ATHOL JOHNSON (VK7AJ) CONTEST

It is likely that this contest will be held around early February. and it is proposed to use the same rules as last year. If you have any suggestions for changes get them to Joe Gelston VK7JG NOW.

RD CONTEST

Sent in your log? Something went wrong with the log sheets sent to Melbourne for inclusion in August 'A.R.' In case you haven't sent yours yet-

send to Federal Contest Manager,
WIA, C/o Orange & District A.R.S.,
PO Box 1065,
Orange NSW 2800

by 15 September 1978

STATE NEWS, Continued

Have you TOLD A POLITITION ABOUT CHANNEL 5A YET ? ? ?

Search & Rescue Communications Symposium

Brian Morgan, VK7RR, and Andrew Boon, VK7AW, represented us at this symposium sponsored by P.& T. and Tasmania Police. In the report submitted to Council by Brian and Andrew they noted the following,

- a. The lack of a common channel between search boats and planes was a problem. Perhaps equipping planes with 2182 kHz would solve.
- b. Organisations such as Rural Fires Board and S.E.S. described their networks. Of interest is that there are around 900 mobile radios with a common 76 MHz frequency.
- c. The WIA contribution included equipment display a talk by Brian on our resources and a demonstration of the coverage of the Hobart 2 metre repeater.

It was suggested that the Amateur Service's main contribution should be as a secondary communication service to handle large number of messages from point to point rather than as a means of communication with field parties. The existence and capabilities of the Amateur Service was made clear.

It was stressed that the Search and Rescue operations should be left to the designated authorities (eg Police and Department of Transport) and that the WIA should be left to our prime function (set up, operate and maintain radio equipment) and if we can be of use to the authorities in this way then we should be prepared to assist.

HAVE YOU HEARD ?????? That the next Channel 0 station is to be at Devonport!

HAVE YOU SEEN A POLITITION ABOUT CHANNEL 5A YET ???? *

ARRL HANDBOOKS

The next delivery of 33 1977 handbooks has been sent to Branches. It is believed that the Southern Branch has some left. All others have been sold.

GENERAL MEETING

It has been the practise to hold general meetings at Conventions, Hamfests etc in order to allow members to bring up items of concern.

Such a meeting can be arranged at T.A.R.C. in November if required but this will only be done if members require this. Let's know if it is needed.

COUNCIL MEETINGS

September 16 I. Nichols, VK7ZZ Hobart, 2 pm

November 4 or 5 Hobart

COUNCIL OFFICERS

President Ian Nichols, VK7ZZ

Secretary Mike Hennessey VK7MC, PO Box 52, Sorell 7172

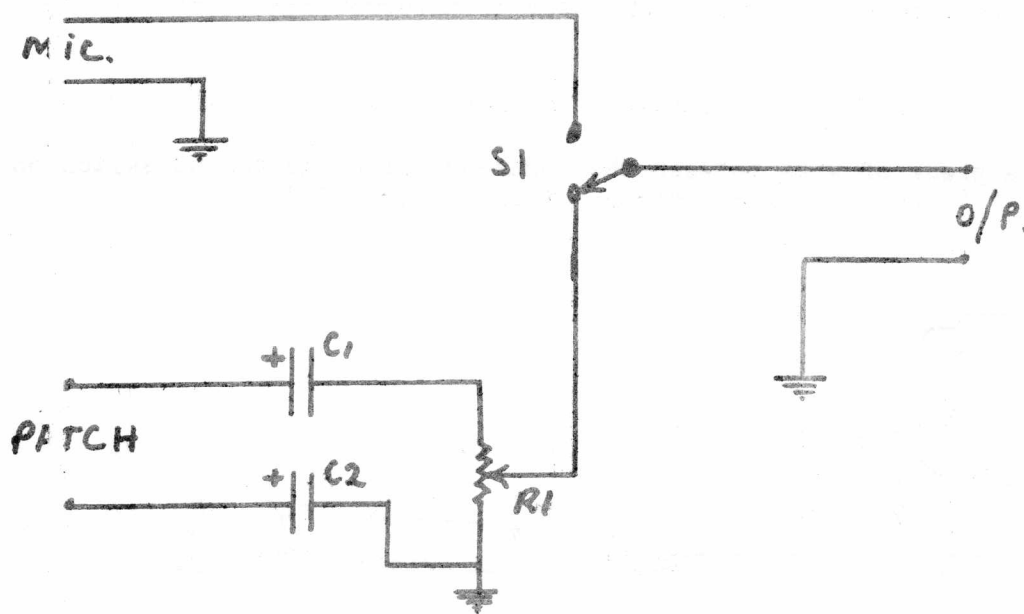
Treasurer Peter Frith VK7PF

Federal Councillor

Membership Officer Brian Yeoman VK7ZBY

Divisional Address, PO Box 1010, Launceston 7250

Simple Audio Patch Unit - VU7ZL and VK7GD.



This unit has been used by Ian, VU7ZL, for a number of years and has worked well. The circuit effectively eliminates an earth loop between your rig and say your cassette tape player. The loop often being a way for RF to get back into the microphone input on the rig.

More recently I have used the circuit for patching from 2 m to 80 m and for playing tapes when originating a broadcast and it is recommended for its simplicity and effectiveness.

In use R1 is adjusted to make the level between microphone and patch source the same.

Parts	C1 and C2	1 MFD 10 W electrolytic capacitors
	R1	5K log potentiometer
	S1	single pole 2 position switch

Graham VK7GD.

GILSTON COMMUNICATIONS

Agents for VICOM - EMONA - ELMEASCO -

RE DRAKE - PLESSEY ELECTRONICS - SCALAR AERIALS.

See AR for items sold - 6 + 2 metre whips in stock

GEMTRONIC 28 mhz RIGS - 28.55 28.56 28.57 28.59 Fitted \$89.00

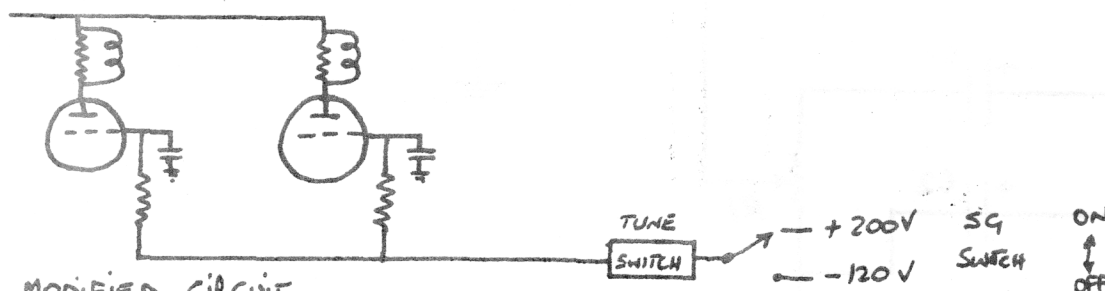
For prompt and efficient service - see Joe Gelston. Phone 443882.

MODIFYING KENWOOD EQUIPMENT FOR NOVICE USE - Joe VK7JG

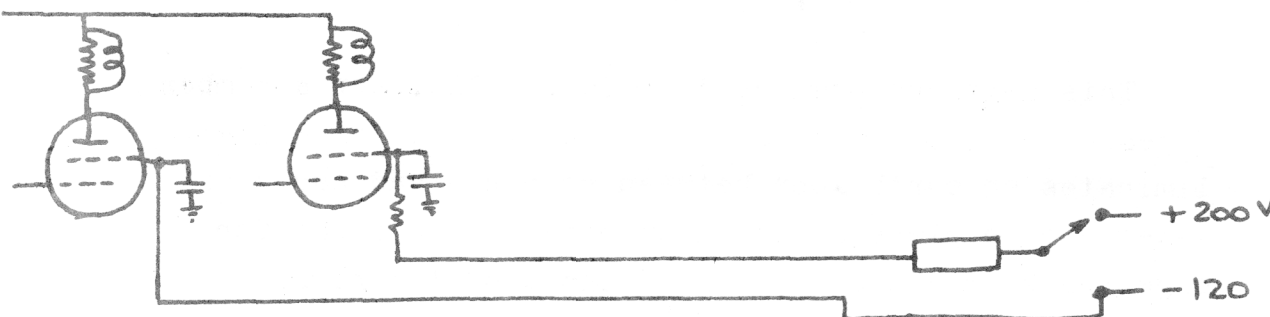
Kenwood Technical Bulletin 7/7801-RE TS520-5208-8205 Reduction in power for NOVICE use.

- (1) Remove wire from 800v terminal on power transformer and connect to 400v terminal.
- (2) Disconnect the thin wire connecting the screens of the final S1002 valves.
- (3) Connect a piece of wire between the "unused" valve and the SG switch on the back panel (this now biases this particular valve off).

ORIGINAL CIRCUIT



MODIFIED CIRCUIT



The above is the Kenwood Technical Bulletin, however I have found on two sets that I have checked that the mains transformer is not tapped at 400v. The transformer is marked 0-400-800 and the output is voltage doubled. If you measure the AC voltage across these windings the 0-400 is about 375VAC and the 0-800 is 400 AC.

To obtain a lower HT voltage, e.g. 400v I modified the power supply to a $\frac{1}{2}$ wave rectifier. To do this lift diode D1 in the rectifier unit above ground. The board has a link, cut this with a pair of side cutters and place a short circuit across C21, this places the "0" end of the transformer winding at earth potential. You now have a 400v DC HT supply.

The P + T Department don't approve of two valves in a novice rig so if you remove one you have to make up for the missing grid capacitance and filament. To do this first connect a 2-20 pf variable capacitor across the "missing valve" socket to ground and replace the filament with a 5.6 ohm 10 watt resistor. Fit this into an octal plug pins 2 and 7, the exhaust fan helps keep it cool.

The transmitter will now operate at novice ratings, however the grid tune will not co-incide with maximum receive sensitivity until the variable capacitor is adjusted. Switch on calibration and adjust preselect for max "S" meter reading; now depress PTT on tune position and adjust variable capacitor for maximum drive. Once this capacitor is adjusted it will not have to be touched again so it remains the same on all bands. Now switch to SSB position and adjust the PA standing current to 30mA.

If you wish you can also pre-adjust the RF output meter so that the 200nA on the meter reads 10 watts RF output.

* * * * *

TUNING THE 19 METRE BAND ON AN FT101 by Winston VK7EM

My FT101 was fitted with a crystal for reception of WWV on 10 mhz. I have made several changes and can now tune 15.0 mhz to 15.5 mhz, which now covers WWV on 15.0 mhz and the entire 19 metre band for international shortwave broadcasting. There are three steps to be taken. Refer to the circuit diagram.

1. Change crystal x 10 from 16.020 mhz to 21.020 mhz.
2. Remove C48 and replace with a L7pf.
3. Locate the tag on switch S1c which, when in the WWV position, is linked to C43. Remove this lead and install a trimmer and fixed capacitor in parallel (both 50pf) from the above tag to earth.

After peaking TC25 and the new trimmer the FT101 now tunes the new band.

* * * * *

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Mint condition - just plug into YAESU equipment.

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* * * * *

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THE WIRELESS INSTITUTE OF AUSTRALIA
TASMANIAN DIVISION

FROM THE DIVISIONAL PRESIDENT:

The Council of the Tasmanian Division of the Wireless Institute of Australia invites all Radio Amateurs, their families and friends to the Tasmanian Amateur Radio Convention.

The venue: The Tasmanian College of Advanced Education - Mt. Nelson near Hobart - the date - November 4th - 5th - don't forget it.

No matter where your interests lie in this marvellous hobby, you should be able to find an example of it at the Convention. Whether it be listening to or working DX, or working C.W., whether it be working through the Satellites, or radio teletype, or V.H.F. All these facets of Amateur Radio and more will be on display at the Convention, as will Amateur Television, and in this field we can promise something which will certainly interest you.

Fill in the Registration form and send your cheque to cover the very reasonable cost, before you forget about it.

At this stage we particularly thank the ladies committee for so magnificently supporting the Convention. Not only is this with finance to lower the cost to each of us, but also with effort towards the Convention itself.

Many Radio Amateurs, too, have worked hard to make this Convention a great success... Reward their efforts by coming along, whether you be an active Radio Amateur, an inactive Radio Amateur, a listener, or a member of the public... All will be welcome.

Ian Nichols, VK7ZZ.

FROM WAGS:

There will be many events happening at the Convention, please indicate if you wish to make up a group to visit.

Tudor Village

A Garden Centre

Ferry Ride

Narrinya Folk Museum

Botanical Gardens

Shot Tower

$\frac{1}{2}$ Day trip to Huonville

$\frac{1}{2}$ Day trip to Richmond

If you have any other places of interest to see, please suggest them:

Ladies requiring space for handicraft display and/or stalls please indicate

Don't forget - Register before October 21st.

- do it now !

THE WIRELESS INSTITUTE OF AUSTRALIA

TASMANIAN DIVISION

REGISTRATION FORM

Tasmanian Amateur Radio Convention - Hamfest, 1978, on
November 4th and 5th at the Tasmanian College of Advanced
Education, Mt. Nelson, near Hobart.

I wish to advise that the following will be attending

NAME.....
(Surname) (Christian Names)

Preferred Name for Lapel Tag:

.....Callsign

ADDRESS.....
.....
.....

Telephone: Home Business

I shall be accompanied by:

Children:Age.....
.....Age.....
.....Age.....

RATES:

Single	\$8.00	Full Weekend
Family & Double	\$16.00	Full Weekend
Sunday	\$ 2.50	Per Person
		Children under 12 Free.

I enclose cheque for \$.....

If you require accomodation booked kindly advise details:

.....

.....

.....

Please register before October 21st.

Registrations to: Secretary,
Wireless Institute of Australia,
P.O. Box 123,
SANDY BAY.....7005.