

QRM

July 1986



Newsletter of the Tasmanian Division
of the
Wireless Institute of Australia

(Insert in 'A.R.')

DIVISIONAL DIRECTORY.Postal Addresses:

Tasmanian Division: P.O.Box 1010, Launceston, 7250.
 Southern Branch: P.O.Box 123, Sandy Bay, 7005.
 Northern Branch: P.O.Box 275, Launceston, 7250.
 Northwest Branch: P.O.Box 194, Penguin, 7316.

Divisional Officers 1986/7:

President: Peter Frith, VK7PF.
 Secretary: Barry Riseley, VK7RS.
 Treasurer: Frank Beech, VK7BC.
 Asst. Sec.: Robin Harwood, VK7RH (Also Minuting Sec.).
 Federal Council: Joe Gelston, VK7JG.
 Council Member: Byron Dilworth, VK7BD.
 Vice- Pres. Arthur Tregaskis, VK7SE.
 Vice- Pres. Russ Pitman, VK7ZRP.

Branch Notices:

NORTHERN BRANCH MEETS AT 8 P.M. ON THE SECOND FRIDAY of each month (except January) in Room G25, Swanson Building, Australian Maritime College, Newnham, Launceston.
 Next two meetings: July 11th. August 8th.

NORTHWEST BRANCH MEETS AT 8 P.M. ON THE SECOND TUESDAY of each month at the Penguin High School.
 Next two meetings: July 8th. August 12th.

SOUTHERN BRANCH MEETS AT 8.15 P.M. ON THE FIRST WEDNESDAY of the month, at The Activity Centre, 105, Newtown Road, Hobart.
 Next two meetings: August 6th. September 3rd.

Broadcast Officers:

Divisional Co-ordinator: Arthur, VK7GH, 34, Ashbolt Crescent, Lutana, 7009.
 Tel: (H) 002.284963. (B) 002.305600.
 Northern Branch Officer: VK7AV Bill.
 Northwest Branch Officer: VK7ZFH Frank.
 Southern Branch Officer: VK7GH Arthur.

Broadcasts commence 09.00Z every Sunday, normally originated on 2m., with relays on 80m., 40m., 144.1 MHz (SSB) and ATV.

Letter from the President.

This letter for "QRM" is a result of the last Council Meeting, when membership figures became available:

"The Older Amateur".

You would all have seen statistics relating to the increasing average age of amateur operators. Some discussion papers have been published recently with ideas to encourage younger members of the community to join amateur radio.

At the last Federal Convention it was agreed that young people are generally too occupied with other activities until they settle down. This could be the best time to recruit new operators and members. Indeed, some do not have time for the hobby until they retire. We have members joining straight into Pensioner Grade, rather than be regraded from other grades on retirement. With this increasing age of members, we have to address the effect on the Institute.

The following is put forward for comment only for possible change in policy. The policy for this Division is to allow concessional membership to Students and Pensioners. What does this mean? It means that their subscription goes only to pay for "A.R." and Federal dues. The Division and Branches receive nothing. The idea originally behind the concession was to make it easier for Students, not yet earning money, and as a reward for age pensioners after years of membership. A student is required to be a full time student, and a Pensioner qualified to hold a Medical Card.

Some of the problems with this system are:

1. How long do students remain students?
2. What about Pensioners without a Medical Card?
3. What about those on Superannuation?

It would seem to be time to equalize the costs of the Division and Branches, over all its members.

The following figures will be of interest to help explain the problem. We have 41 Pensioner/student members and 275 other grades. This year the 275 paid \$7 each towards Division and Branch expenses. If every member paid the same we would need only \$5.20. My personal solution would be obvious - we have nothing to lose. I see the Medical profession have a similar problem in dealing with pensioners.

Peter Frith, VK7PF, President.

End-of-page Brief.

Heard during the recent Halley's Comet affair: "It's not very bright. D'you think I'd get a better picture with electronic flash?"

4.

Letter to the Editor.

From Chas. Harrisson at the QSL Bureau: Unclaimed cards are held at the Bureau for the Following members:

VK7BA. BG. BP. DL. DN. DT. ES. FR. FT. GD.
GM. HV. HW. JZ. KX. KZ. LS. MH. OC. PL. SG.
TD. KAF. KDV. KTC. KXA. NBE. NET. NIK. NIM. NJO.
NPT. NRV. ZAJ. ZAY. ZBG.

Some of these cards have been on hand for up to two years and will be destroyed at the end of July unless claimed. There are also a number of cards for non-members which will be similarly dealt with.

If you want yours please contact me at 95, Wentworth Street, Bellerive, 7018, telephone number 002.442854.

Congratulations on the latest version of "QRM". I was very pleased to see more Branch News as I believe a Bulletin such as this should be used to keep members in touch with what's going on in the Division.

As a personal aside, it may interest you to know that the first VK7JK was Jack Heine who is now VK3JF. Jack and I were the only ones to sit for the exam in May 1927. We both passed, bringing the total licences in the State to about 25, I reckon.

73's from *Chas*

Tasmanian Devil Net.

Andy, JH1QYT, requires another three VK7 contacts to qualify for the award.. When he qualifies, he will be the second Japanese station to do so. Andy speaks good English, and is working in his father's pharmacy some miles outside Tokyo. He may be heard most weekdays on 21175 to 21185 from 0530Z. He hopes to visit Tasmania next year and would be glad to hear those three VK7's as soon as possible. Some new VK7's would be welcome on Tuesday nights on 3590 MHz from 1000Z - even if you can spare only half an hour (or stand it), our regular ZL's and mainlanders will love you.

From VK7NBF Bob.

WOULD ALL ASPIRING CONTRIBUTORS TO "QRM" PLEASE NOTE THAT THE EDITOR'S CLOSING DATE FOR THE AUGUST EDITION WILL BE 19th. JULY.

WICEN (Southern Branch)

With your copy of QRM this month you should find a WICEN (Southern Branch) registration form as an enclosure.

The form has been designed with two main objectives, firstly to bring up to date the record of Radio Amateur resources available in the event of a natural disaster and secondly to make it possible to classify and deploy the range of equipment and talent available in the most effective way.

The deployment of equipment will be self evident but it is important that the organizers have sufficient information to direct volunteers to tasks within the range of their interest and capabilities.

Whatever the final understanding we have with S.E.S. we will be forming a team where every member understands his role and will have the opportunity to exercise and develop his skills.

Some examples of the anticipated roles are as follows.

1. V.H.F. operators to handle traffic between S.E.S.Hq. and a WICEN central base.
2. V.H.F. and H.F. operators to handle traffic between the WICEN central base and a WICEN portable base anywhere in the State by means of phone and C/W.
3. V.H.F. (handheld) operators with bushwalking capability to supply a link between S.E.S. field parties and a WICEN portable base.
4. Reserve operators who could be called upon in case of an extended emergency but who do not have sufficient time available to attend all exercises.
5. Members with organizing ability to operate backup rosters in an emergency.
6. Members with particular technical skills to design the small pieces of equipment required to give the team the special capability it needs (e.g. the V.H.F. mini repeater already in use).
7. New recruits to Amateur Radio who will be attached to experienced operators for experience and who will be the guarantee of future WICEN manpower.

Completing the Registration Form will indicate your willingness to participate but will not commit you to dedicate time you can not afford to the movement. Where possible exercises will be repeated to give members a second chance to take part.

Please send your completed form to the address below or hand it to me at the next meeting.

WICEN Southern Branch Co-Ordinator
 Alan Widdowson VK7CI,
 29 Kingston Heights
 Kingston Beach, 7151

6m. RTTY Beacon proposed for Hobart!

Preamble: It has been noted that there are several amateur beacons that exist and used to conduct slow morse broadcasts in Australia.

There are many amateur stations equipped with existing 6m. gear, and the 6m. band is easily accessed on a receive only basis, at very low cost, through the facilities of the W.I.A. Activity Centre.

Teleprinter equipment has also become available to many amateurs and there are low-cost computer systems with RTTY programmes. Both systems, however, require a RTTY signal for tuning and alignment.

We are fortunate in Tasmania to have some of the leading programmers in the RTTY mode and there has been a great deal of development in this area in the last few months.

Proposal: To establish a RTTY beacon in Hobart for the following purposes:

1. To provide a notice board for the Southern Branch of the W.I.A.
2. For the alignment of RTTY demodulators and teletype equipment.
3. To revitalise the use of the 6m. band.

Equipment: VIC20 Computer and data set.

Dedicated RTTY software.

RTTY modulator for 170 Hz shift and 45 and 110 Baud transmission.

Crystal controlled 25w. F.M. transmitter equipped with timer and time-out facilities, to be operated in the 6m. amateur band at a suggested frequency of 52.540 MHz.

$\frac{1}{4}$ wave vertical antenna with 50 ohm coax feed to the transmitter.

Location: Activity Centre, W.I.A. Southern Branch, 105, Newtown Road, HOBART.

Operation: It is planned to provide on the hour and at 15-minute intervals, one or two pages of non-commercial information. This broadcast will consist of the station identification, message, and will end with a repeat of station identification.

The transmitter will be controlled by a clock, battery operated and interfaced to a second timer, connected as a time-out safeguard and protected by a fault detect system.

The computer will be operated from 12 volts D.C. to protect the programme during power failure, and it is planned to update the information used in the RTTY broadcast on a weekly basis or as necessary. Access to the transmitter and control equipment will be restricted to licensed members of the W.I.A. and the area will be locked when unattended.

These specifications have been attached to a letter sent to the State Manager, Radio Frequency Management, D.o.C., also stating that the proposal had been discussed at the last meeting of the W.I.A. in Hobart. The Southern Branch supports the application.

John Hewson,
RTTY Co-ordinator.

Used Equipment Register.

Members are invited to register any amateur-related gear with the Southern Branch Activity Centre Management.

Transceivers, receivers, transverters, converters, amateur-related computer equipment, printed VDU programmes, mobile and handheld rigs, antenna tuners, antennas, rotators, masts or towers - in fact, anything that you find is excess to your requirements.

If you are considering buying new equipment, or interested in swapping something, then register your equipment first. The concept of the register is to help old hands and newcomers alike to keep abreast of the equipment available on the local market. This will be of particular benefit to newly-licensed amateurs who would not be too sure about what they may need, its suitability, or technical condition. Preferably the actual transaction would be directly between the buyer and the seller, using the services of the Equipment Register for the initial contact.

The Activity Centre Test Bench facilities could be used to evaluate equipment before settlement, if any doubts exist.

The contents of the Register would be printed in "QRM" while additions and subtractions would be announced on the weekly broadcast, and possibly listed on the proposed 6m. RTTY Noticeboard.

All enquiries should be directed to the W.I.A. Southern Branch Activity Centre, 105, Newtown Road, Hobart, or you could call personally at that address on any Tuesday evening from 7.30 p.m. On the same evening, you could also call VK7SB on Repeater 2, 2m. This station is monitoring regularly on Tuesdays during our activity period, say between 7.30 and 10.30 p.m.

from VK7VV, Rai.

The "Tas Devil Rig".Some further fault-finding tips from Ian VK7IJ.

Q5 overheating	No heatsink fitted	Fit heatsink (this essential)
Output appears to be frequency doubled	L3/base Q5 incorrectly terminated	Remove R14 & replace with link. Connect res. 47-100 Ω from link to E. This mod. is recommended!
VFO not oscillating (no other faults)	Q1 high g_m , reducing supply voltage via R2.	Reduce R2 to 100 Ω .
Mute circuit ineffective due to low voltage on IC3-1.	Q6 = emitter follower, output = $5 - 0.6 = 4.4v$.	Replace Q6 with PNP type, emitter to 12 v. Disconnect R15 from IC2 & connect to wiper of VR5 leaving IC2 o/p floating.
Side tone generator not working.	Q12 faulty.	Check.

NOTE: SOME MAY TRY TO ACHIEVE GREATER POWER - THIS IS NOT PRACTICAL, HOWEVER, WITHOUT A MAJOR REDESIGN, Viz. with a 12v. supply and 50 Ω filter, output =

$$\frac{V^2}{2z} = \frac{144}{100} = 1.44 \text{ watts so save those output transistors!}$$

I wish to express my appreciation to all who have helped compile this list, and for all the encouraging reports about the design so far.

Ian, VK7IJ.

SO YOU WANT TO CONTACT THE EDITOR?

His name is John Rogers. His callsign is VK7JK. His telephone number is 002.293402. His address is:

1, Darville Court,
Blackman's Bay,
Hobart, 7152.

And when you lose your copy of QRM, remember he's QTHR. When he is at home, the 2m rig is normally running and listening to Repeater 2.

Radiotorial.

In the 'last couple of months, your Editor has brought to your notice the idea of a 6m. RTTY station in Hobart, an article on a Public Digital Radio Service and comments on our need to be informed in good time of items on the Federal agenda.

This month we print John's notes on the RTTY station and Rai's ideas on an Equipment Exchange. On all these subjects, however, we have been overwhelmed by the deafening silence generated by the readers of "QRM". It's no wonder we find all sorts of moves are taking place that in retrospect we disapprove of. We have now acquired a copy of a Discussion Paper on the Possible Restructuring of the Amateur Radio Service in Canada, and it contains a great deal of 'meaty' comment, much of which applies here in Australia. It's much too long to print in "QRM" but the full text is held at the Activity Centre in Hobart. For those in the north and north-west of the State, photocopies can be supplied on request.

We suggest it should be read and digested before the next meetings of the Branches. There might then be a more deafening response to the changes that are looming over our hobby.

VK7JK.

New Members this month.

We welcome to the W.I.A. Mr. G. Cox, VK7GC of Launceston, and Mr. G.E. Gill, associate, of Devonport.

W.I.A. Broadcast Roster for 1986.

<u>Dates</u>	<u>Branch responsible.</u>
29 June, 6, 13, 20 July	Northwestern.
27 July, 3, 10, 17, 24 August	Southern.
31 August, 7, 14 September	Northern.
21, 28 September, 5, 12 October	Northwestern.
19, 26 October, 2, 9, 16 November	Southern.
23, 30 November, 7 December	Northern.
14, 21, 28 December, 4 January '87	Northwestern.

Broadcast Originating Stations, July 1986.

29 June... .. VK7SE	7 July... .. VK7WP
13 July... .. VK7XL	20 July... .. VK7RN
27 July... .. VK7GH	

WIRELESS INSTITUTE STORE (STOCK)
VK7ZBW (MIKE) STORES & EQUIPMENT OFFICER
PHONE (002)-28 7010 (QTHR)
NOTE !!! PRICE INCREASE FROM 01/06/86

WIA	ITEM DESCRIPTION	STATUS	PRICE	WIA	ITEM DESCRIPTION	STATUS	PRICE
01	UNDERSTANDING AMATEUR RADIO	2 ON ORDER	\$ 12.60	42	WORLD PRESS SERVICE FREQ'S	IN STOCK	\$ 15.00
02	RADIO AMATEUR LICENCE MANUAL	>	\$ 10.25	43	AMATEUR OPERATORS H/BOOK P & T	UPDATE OCT	\$
03	OPERATING MANUAL (2ND EDIT.)	>	\$ 12.50	44	W.I.A. BOOK VOLUME 1	IN STOCK	\$ 3.50
04	ARRL HANDBOOK 1986	>	\$ 34.20	45	W.I.A. CALLBOOK 1985/86	IN STOCK	\$ 4.50
05	HINTS & KINKS FOR RADIO AMAT.	IN STOCK	\$ 10.20	45D	W.I.A. CALLBOOK 1984/85	IN STOCK	\$ 2.00
05D	NOVICE QUESTIONS & ANSWERS	IN STOCK	\$ 4.10	46	LOG SHEETS (PER 100)	>	\$ 2.50
06	WEEKEND PROJECTS	>	\$ 10.50	47	W.I.A. LOGBOOK	IN STOCK	\$ 4.60
07	ARRL ANTENNA BOOK	IN STOCK	\$ 19.35	48	THE RADIO AMATEURS WORLD ATLAS	IN STOCK	\$ 3.00
08	FM & REPEATERS FOR RADIO AMAT.	IN STOCK	\$ 12.45	49	STICKPIN TRADITIONAL AUST.	IN STOCK	\$ 4.00
09	SATELLITE EXPERIMENTERS H/BOOK	1 ON ORDER	\$ 23.40	50	STICKPIN INTERNAT. DIAMOND	IN STOCK	\$ 4.00
10	RADIO AMAT. EXAM MANUAL RSGB	>	\$ 13.65	51	STICKPIN INTERNAT (CALLSIGN)	IN STOCK	\$ 4.00
11	RADIO AMAT. OPERATIONS MANUAL	>	\$ 23.40	52	W.I.A. STICKERS (CAR WINDOW)	IN STOCK	\$.50
12	RADIO COMMUNICATIONS H/BOOK	1 ON ORDER	\$ 27.50	53	W.I.A. MINI LOGO (SHEET OF 10)	>	\$ 1.00
12D	AMATEUR RADIO AWARDS RSGB	IN STOCK	\$ 7.10	54	W.I.A. TIES	IN STOCK	\$ 9.50
13	AMATEUR RADIO TECHNIQUES	1 ON ORDER	\$ 21.30	55	W.I.A. KEYRING	IN STOCK	\$ 3.50
14	TEST EQUIPMENT FOR RADIO AMAT.	IN STOCK	\$ 21.00	56	W.I.A. PENNANTS (FELT)	IN STOCK	\$ 4.00
15	HF ANTENNA'S FOR ALL LOCATIONS	IN STOCK	\$ 23.00	56A	W.I.A. PENNANTS (SATIN)	IN STOCK	\$ 6.00
16	VHF/UHF MANUAL RSGB	IN STOCK	\$ 31.75	57	T-SHIRT (75TH ANNIVERSARY)	>	\$ 8.00
17	CALLBOOK 1985 RSGB	>	\$ 30.00	58	LEISURE SHIRT (LOGO ON POCKET)	>	\$ 11.00
18	UHF COMPENDIUM PARTS 1 & 2	>	\$ 16.00	59	WINDCHEATER (W.I.A. LOGO)	>	\$ 17.00
18A	RAD/DATA REF. BOOK	>	\$ 13.20	60	W.I.A. CLOTH BADGES	IN STOCK	\$ 2.50
18B	A/R SOFTWARE	>	\$ 16.20	61	SOUNDS OF A/R	>	\$ 7.00
19	SATELLITE TRACKING SOFTWARE	IN STOCK	\$ 18.00	CA1	BELDIN COAX (RG213)/METRE	>	P.O.A.
20	INTERFERENCE HANDBOOK	IN STOCK	\$ 12.40	CA2	BELDIN COAX (RG58U)/METRE	>	P.O.A.
21	WIRE ANTENNA'S FOR RADIO AMAT.	IN STOCK	\$ 16.00	CA3	BENELEC COAX (RG213)/METRE	IN STOCK	\$ 1.98
22	RADIO AMATEUR ANTENNA H/BOOK	IN STOCK	\$ 20.10	CA4	BENELEC COAX (RG58C/U)/METRE	IN STOCK	\$.54
23	BEAM ANTENNA HANDBOOK (NEW ED.)	IN STOCK	\$ 11.75	CA5	ANDREWS HELIAX (LDF450)	>	P.O.A.
24	ALL ABOUT CUBICAL QUAD ANTENNA	IN STOCK	\$ 16.00	CO3	N-TYPE ACME CONNECTOR (C39-19)	>	P.O.A.
25	CARE & FEEDING POWER GRID TUBE	>	\$ 18.00	D11	VERBATIM FLOPPY DISKS/10	>	\$ 21.00
26	VHF H/BOOK FOR RADIO AMATEURS	IN STOCK	\$ 16.60	D12	CTRL.DATA FLOPPY DISKS/10	>	\$ 21.00
27	MICROCOMPUTERS IN AMAT. RADIO	1 ONLY	>	S01	MAGNA SOLDER & FLUX (PER FOOT)	IN STOCK	\$ 3.50
28	HAM NOTEBOOK VOLUME 1	NOT AVAIL.	>	W11	ENAMELLED WIRE 14 GAUGE PER/LB	IN STOCK	\$.75
29	HAM NOTEBOOK VOLUME 2	NOT AVAIL.	>	W12	ENAMELLED WIRE 16 GAUGE PER/LB	IN STOCK	\$
30	AMATEUR TELEVISION H/BOOK VOL2	>	\$ 4.60				
31	AMATEUR TELEVISION H/BOOK VOL3	IN STOCK	\$ 4.60				
32	TV FOR AMATEURS	IN STOCK	\$ 5.85				
32A	MICRO & TV PROJECTS	>	\$ 8.00				
33	FOREIGN CALLBOOK 1986	>	\$ 32.00				
34	USA CALLBOOK 1986	>	\$ 33.00				
35	DX GUIDE	IN STOCK	\$ 5.60				
36	RADIO AMATEUR WORLD ATLAS	IN STOCK	\$ 5.60				
37	R.A. PREFIX MAP OF WORLD	IN STOCK	\$ 4.10				
38	A.R. AND ELECTRONIC STUDY GUIDE	ON ORDER	\$ 14.50				
39	BASIC TRAINING MANUAL NZART	>	\$				
40	CALLBOOK 1985 NZART	>	\$ 6.00				
41	RTTY TODAY UN.ELEC.	IN STOCK	\$ 15.00				

WICEN
SOUTHERN TASMANIAN BRANCH
REGISTRATION FORM

.....

NAME..... CALLSIGN.....
ADDRESS..... PHONE (H).....
..... (W).....
.....

TIME AVAILABLE FOR EXERCISES (Tick one or more)
Some evenings.....Some weekends.....Overnight.....
Most days or evenings.....

COULD YOU BE RELEASED FROM WORK IN AN EMERGENCY ? (Y)..(N)..

IN WHICH BRANCH OF THE SERVICE WOULD YOU PREFER TO ACT ?
(Number in order of preference)
Vehicular units.....Field units(S & R).....Point to point
operating.....Technical development.....

PREVIOUS WICEN EXPERIENCE (Courses, exercises etc.)

EQUIPMENT AVAILABLE(Tick one or more and indicate power and
battery endurance)

	MOBILE	PORTABLE	HOME BASED
MF 160M			
HF 40M 80M			
VHF 2M			
VHF 6M			
UHF			

ADDITIONAL EQUIPMENT

Portable mast and antenna..... Repeater patch.....
Vox patch..... RTTY(FAX).....240V generator.....
Scanner.....476/77mhz Tranceiver.....
Other

TRANSPORT AND ACCOMMODATION

Car.....Stationwagon.....Campervan.....4WD.....
Tent.....Caravan.....

Signed.....

Date.....