

QRM

Amateur
Radio
News



AUGUST 1985.

Issued by the Tasmanian Division of
the Wireless Institute of Australia

Radiatorial Comment

The last two or three months have seen a steadily increasing number of weekly participants in the Activity Centre at Newtown Road, Hobart. From reports in the Sunday morning broadcast, the N.W. Branch's Activity Night in Penguin is also increasingly well patronised. In our last Editorial, we expressed the hope that these would produce an improvement in the real participation by members, in W.I.A. projects. The most significant factor in these happenings is the setting-up of a single major project with which all can identify, and in which all can take a practical part, knowing clearly what the end-product is to be. Converting the MRT25A to 6m., for instance, has been the aim of the Southern Branch Activity Group - and perse verance has had to be the name of the game when starting out on this trail. Although the method of conversion was supposed to take "about an hour", in fact this proved highly optimistic - not because the instructions were wrong or misleading, but because the marking system for capacitors was both wrong and misleading. And this brings us to the "crunch point" of this Editorial. It seems to us that the whole point of code-marking components is to create a system for easy, rapid identification of values, but the present situation, with both resistors and capacitors, is frustrating in the extreme. F'rinstance, a capacitor stamped 220 is really 22pF, one with 221 on it, is actually 220pF - SOMETIMES!!

We have come to the conclusion that progress is impossible without a capacitance measuring device. Many of the modifiers have had to "go back to square one" when transmitter tests were carried out. Your Editor would be delighted to have your comments on this topic, either to change the system, to explain how to make it foolproof (for his personal benefit) or to give us a circuit for a home-brew capacitance meter.

At least it's emphasising our idea of producing a series on amateur testing equipment!

an
VK7JK

QSL INFORMATION SHEETS.

As promised in our July issue, we complete the QSL sheets sent to us by Allen, VK7AN. A2 to VE are available in last month's copy, from the Editor if you happened to miss it.

CQデータ・シート④

世界のQSLビューロー

プリフィックス	国 名	住 所
VE,VO,VY	CANADA	VE7 : Burnaby Amateur Radio Club P.O.Box80555, South Burnaby, BC V5H 3X9 VE8 : c/o R. Ziemann, VE8RZ, 2888 Lanky Ct., Yellowknife, NWT X1A 2G4 VO : c/o P.O.Box6, St. John's, NF A1C 5H5 VY1 : Yukon Amateur Radio Association P.O.Box4597, Whitehorse, YUK Y1A 2R8
VK	AUSTRALIA	VK1 : P.O.Box E46, Queen Victoria Terrace, ACT 2600 VK2 : P.O.Box73, Teralba, NSW 2284 VK3 : c/o B. Gray, VK3BYK, 1 Amery St., Ashburton, Vic. 3147 VK4 : c/o G.P.O.Box638, Brisbane, Qld, 4001 VK5 : c/o R. Dobson, VK5DI, 16 Howden Rd., Fulham, SA 5024 VK6 : c/o J. Rumble, VK6RU, G.P.O.Box F319, Perth, WA 6001 VK7 : c/o G.P.O.Box 371 D, Hobart, Tas, 7001 VK8 : c/o H.G. Andersson, VK8HA, P.O.Box 1418, Darwin, NT 5794 VK9-φ : c/o N. Penfold, VK6NE, 2 Moss Court, Kingsley, WA 6026
VP2M	MONTSERRAT	Montserrat Amateur Radio Society, P.O. Box448, Plymouth
VP2V	BRITISH VIRGIN IS.	British Virgin Islands Radio League, P.O.Box653, Road Town, Tortola
VP9	BERMUDA	Radio Society of Bermuda, P.O.Box275, Hamilton 5
VS6	HONG KONG	Hong Kong Amateur Radio Transmitting Society, P.O.Box541, Hong Kong
VU	INDIA	Amateur Radio Society of India, P.O.Box 3005, New Delhi 3
W,AA AL K,N	U.S.A.	W1 : Hampden County Radio Association P.O.Box216, Forest Park Station, Springfield, MA 01108 W2 : North Jersey DX Association, P.O.Box599, Morris Plains, NJ07950 W3 : Cumberland County Amateur Radio Service P.O.Box448, New Kingstown, PA 17072-0448 K4,N4,W4 : Mecklenburg Amateur Radio Society P.O.Box DX, Charlotte, NC 28220 AA-AK4,KA-KZ4,NA-NZ4,WA-WZ4 : Sterling Park Amateur Radio Club Call Box 599, Sterling Park, VA 22170 W5 : ARRL W5 QSL Bureau, P.O.Box 44246, Oklahoma City, OK 73144 W6 : ARRL 6th District DX QSL Bureau P.O.Box 1460, Sun Valley, CA 91352 W7 : Willamette Valley DX Club, P.O.Box555, Portland, OR 97207 W8 : Columbus Amateur Radio Association Radio Room, 280 E. Broad St., Columbus, OH 43215 W9 : Northern Illinois DX Association, P.O.Box519, Elmhurst, IL 60126 Wφ : AK-Sar-Ben Radio Club, P.O.Box291, Omaha NE 68101 KA2 : Far East Amateur Radio League M c/o S.Fleming, Sagami Facility, A.P.O. San Francisco 96343 KA6 : Radio Club of Okinawa P.O.Box217, Torii Station, A.P.O.San Francisco 96331 KG4 : Guantanamo Amateur Radio Club, Box73, F.P.O.New York 09593 KH2 : Marianas Amateur Radio Club, P.O.Box445, Agana, Guam 96910 KH4 : c/o Box43, F.P.O. San Francisco 96614 KH6 : c/o J.H Oka, KH6DQ, P.O.Box 101, Aiea, Oahu, HI 96701 KHφ : P.O.Box 7388, Saipan, Northern Marianas 96950 KL7 : Alaska QSL Bureau, 4304 Garfield St Anchorage, AK 99503 KP2 : Virgin Islands Amateur Radio Club P.O.Box 11360, Charlotte Amalie, St.Thoman, VI 00801 KP4 : Radio Club de Puerto Rico, P.O.Box 1061, San Juan, PR 00902

プリフィックス	国 名	住 所
W, AA-AL K, N	U.S.A.	KX6 (Kwajalein): Kwajalein Amateur Radio Club Box 444, A.P.O. San Francisco 96555 KX6 (Eniwetok): Eniwetok Amateur Radio Club Eniwetok, Marshall Islands 96737 SWL: c/o M. Witkowski, 4206 Nebel St., Stevens Point, WI 54481
XE	MEXICO	Liga Mexicana de Radioexperimentadores, P.O.Box907, 06000 Mexico, D.F.
Y2-9	GERMANY	Radioklub der D.D.R., P.O.Box 30, 1055 Berlin
YB-YE	INDONESIA	Organisasi Amatir Radio Indonesia, P.O.Box96, Jakarta 10002
YJ	VANUATU	Vanuatu Amateur Radio Society, P.O.Box 665, Port Villa
YK	SYRIA	Technical Institute of Radio, P.O.Box 35, Damascus
YN	NICARAGUA	Club de Radioexperimentadores de Nicaragua, P.O. Box925, Managua
YO	ROMANIA	Federatia Romana de Radioamatorism, P.O.Box 05-50, R-76100 Bucharest
YS	EL SALVADOR	Club de Radio Aficionados de El Salvador, P.O.Box 517, San Salvador
YU	YUGOSLAVIA	Savez Radio-Amatera Jugoslaviye, P.O.Box 48, 11001 Beograd
YV	VENEZUELA	Radio Club Venezolano, P.O.Box2285, Caracas 1010A
Z2	ZIMBABWE	Zimbabwe Amateur Radio Society, P.O.Box 2377, Harare
ZB2	GIBRALTAR	Gibraltar Amateur Radio Society, P.O.Box 292, Gibraltar
ZF	CAYMAN IS.	Cayman Amateur Radio Society, P.O. Box 1029, Grand Cayman
ZK-ZM	NEW ZEALAND	New Zealand Association of Radio Transmitters, P.O.Box40-212, Upper Hutt
ZP	PARAGUAY	Radio Club Paraguayo, P.O.Box 512, Asuncion
ZS	SOUTH AFRICA	South African Radio League, P.O.Box3037, Cape Town, C.P.
3A	MONACO	Association des Radio-Amateurs de Monaco Villa Marie-Joseph, 24 AV. Prince Pierre 98000
3B	MAURITIUS	Mauritius Amateur Radio Society, P.O.Box 467, Port Louis
3D2	FIJI	Fiji Association of Radio Amateurs, P.O.Box184, Suva
3D6	SWAZILAND	Radio Society of Swaziland, P.O.Box64, Manzini
4S	SRI LANKA	Radio Society of Sri Lanka, P.O.Box907, Colombo
4X, 4Z	ISRAEL	Israel Amateur Radio Club, P.O.Box3500, Haifa 31034
5B4	Cyprus	Cyprus Amateur Radio Society, P.O.Box 1267, Limassol
5N	NIGERIA	Nigerian Amateur Radio Society, P.O.Box2873, Lagos
5W	WESTERN SAMOA	Western Samoa Amateur Radio Club, P.O.Box 1069, Apia
5Z	KENYA	Radio Society of Kenya, P.O.Box45681, Nairobi
6W	SENEGAL	Association des Radio-Amateurs du Senegal, P.O.Box971, Dakar
6Y	JAMAICA	Jamaica Amateur Radio Association, 76 Arnold Rd., Kingston 5
7P	LESOTHO	Lesotho Amateur Radio Society, P.O.Box949, Maseru 100
7X	ALGERIA	Amateurs Radio Algeriens, P.O.Box 2, Alger-Gare
8P	BARBADOS	Amateur Radio Society of Barbados, P.O.Box 814E, Bridgetown
8R	GUYANA	c/o S. D'Ornellas, 8R1B, 110 Barrack St., Kingston, Georgetown
9H	MALTA	Malta Amateur Radio League, P.O.Box575, Valletta
9J	ZAMBIA	Radio Society of Zambia, P.O.Box 20332, Kitwe
9L	SIERRA LEONE	Sierra Leone Amateur Radio Society, P.O.Box 10, Freetown
9M	MALAYSIA	Malaysian Amateur Radio Transmitters' Society P.O.Box 10777, Kuala Lumpur
9Q	ZAIRE	Union Zairoise des Radio-Amateurs, P.O.Box1459, Kinshasa 1
9V	SINGAPORE	Singapore Amateur Radio Transmitting Society G.P.O Box 2728, Singapore 9047
9Y	TRINIDAD AND TOBAGO	Trinidad and Tobago Amateur Radio Society, P.O.Box 1167, Port of Spain

The copies of this newsletter will be distributed to WIA members at Branch meetings and to other interested subscribers by post at purely nominal cost. Anyone who would wish to take up this offer, please contact the Editor on 002.293402.

ALARA's Poetry Corner.

This poem, Helene tells me, was written by ALARA's new Publicity Officer, Joy Collis VK2EBX, who has composed many poems. Apparently they come to her "out of the blue" and she needs to keep a pencil and paper with her at all times!

DX BEFORE DISHES!

DX before dishes?

That's O.K., I suppose.

The dishes are always with us -

The DX comes and goes.

Crumbs upon the carpet?

You can't vacuum the floor.

You might miss, above the cleaner's noise

A chat with Labrador.

And though the dust is inches thick,

That is a matter minor,

When you hear, above the QRM,

A YL voice from China!

What if you haven't made the beds,

Or if the kids are bawling?

These things are unimportant

When San Felix is calling!

What if the lawn needs mowing,

All the windows cease to shine?

Who cares about those boring chores,

When Svalbard's 5 by 9?

The O.M.'s bent the tinopener?

Well, who can think of cooking

When Africa is coming in,

And round the bends you're looking?

BUT - if you do the dishes,

(With one ear to the set)

Here's a bit of good advice

'Twould pay not to forget: If you should hear some rare DX

Which everything surpasses,

Don't "drop what you are doing"

If you're washing crystal glasses!!

(Perhaps that will encourage the ladies to browse through QRM as well - or even to start to contribute towards it each month!)

A.L.A.R.A. REPORT.

ALARA would like to extend a big welcome to Grace VK7NNN who recently joined our Association, bringing the number of members in VK7 to SIX. Grace took part in the ALARA 10th Birthday Award and, owing to her participation in one of the recent weekly nets, we have achieved a record number of 3 VK7's present.

Helene went to the VK3 ALARA 10th birthday get-together at the Moorabin Radio Club on 26th July and about 30 ALARA members were there.

(Cont.)

(Cont.).

It was a particular privilege to meet Austine VK3YL who was the first female licensed "op" in Australia, having been on the air since 1930. Several previous ALARA Presidents attended the get-together, to make it a really memorable occasion.

from VK7HD Helene
(President)

W A N T E D .

Second hand transceiver, to buy reasonably cheaply, or to loan for the period of the JOTA weekend and a short practice time beforehand.

Please contact VK7KTC (QTHR) or 002-278983 (evenings).

W.I.A. 75th. Birthday Celebrations.

The President of the Rotary Club of Kangaroo Bay (at Bellerive) recently became aware of the W.I.A's 75th. Birthday Celebrations and invited Warren VK7CV to be guest speaker at his club to talk on it and on Amateur Radio in general. This he did on Monday evening 22nd. July, with a display of equipment and a thirty minute talk with an emphasis on W.I.C.E.N. and the availability of repeaters. As a practical demonstration, Warren had a pre-arranged contact with Bruce VK7ZBA at Cranbrook near Bicheno on the east coast. The equipment in use was the IC2A handheld which created a lot of interest and questions. In all, it was a most successful evening.

W.A N T E D .

Yaesu SP101P or SP101 extension speaker and FV101 external VFO. Must be clean or near mint condition. Cash paid. Above all must suit FT101E.

Contact Allen VK7AN (003) 317914. 3, Denman Road, L'ton 7250

W A N T E D .

One FT-7 or TS-120V in good condition. Please contact
VK7EA (QTHR) Phone (002) 287246.

Two 27 MHz CB Transceivers, suitable for conversion to 27 MHz Marine Band. Please contact VK7PV (QTHR) or phone (002) 280299 (Bus)
or (002) 446132 (A.H.)

Q S L C A R D S .

PLEASE do not throw out your old QSL cards or your surplus. I would like to start up an archive for our Tasmanian Division. Just give me a ring on (002) 296504 and I will pick them up. Or send them to VK7DQ, 10 Maranoa Road, Kingston, 7150.

Thank you, VK7DQ.

73's from Jim, VK3YJ.

You will remember the excellent contribution made to our July issue by Jim who writes the Australia column for "73" magazine. Well, when Helene, President of ALARA, writing on another page, mentioned that she had met Austine, VK3YL, the opportunity to publish the following article seemed too good to miss. Our acknowledgments to 73 magazine.



AUSTRALIA

Jim Joyce VK3YJ
44 Wren Street
Altona 3018, Victoria
Australia

THE AUSSIE YL

How often we have heard the pileups and QRM disappear when a rare DX station says those magic words "Please stand by—there's a YL calling." Even those persistent callers, jammers, and deliberate QRM merchants who have, unfortunately, become a sad fact of life on amateur radio these days seem to go QRT when the ladies are transmitting. Maybe it is chivalry, or perhaps a mark of respect to these adventurous young ladies who have involved themselves in what was predominantly a male hobby in the early days of amateur radio. Every so often, a YL operator is heard who is a fine example of why we OMs have that respect.

Austine VK3YL

Austine Henry VK3YL is such a young lady. As a life member of the Society of Wireless Pioneers and as a member of 54-years standing with the Wireless Institute of Australia, she has the distinction of having the longest YL membership record. In 1930, Austine was awarded a trophy from the WIA for the best piece of home-brew gear in the local WIA home-brew competition.

1930 was an active year for Austine, as she also became a member of the ARRL on April 14, 1930. She has 30 years of membership in the RSGB, plus she has been a member of NZART over the last few years. Austine has really kept her finger on the pulse of overseas amateur-radio activities. No wonder she has many tales to tell of the good old days in radio.

When she received her first crystal set as a child, she immediately pulled it to pieces to see how it worked, graduating to valve [tube] sets that she made herself, gaining enough expertise to pass her experimental license exam on May 13, 1930. Only the third woman to obtain an amateur license in Australia, Austine became VK3YL.

As there was no commercial gear available for amateurs in those days, Austine learned at an early stage how to get the best out of a home-brew 1-Watt-input transmitter. To get the crystals for her

sets, she used to do a tour of the city opticians, getting their broken or rejected quartz lenses, and, if successful, would hurry home with them to grind her own crystals.

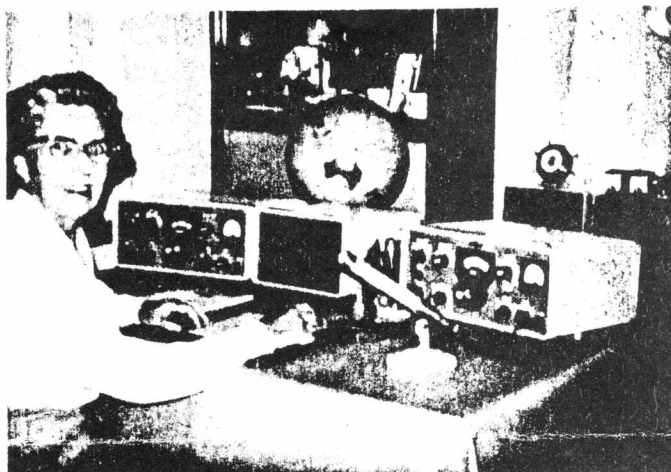
With this type of equipment, Austine had her first CW contact into Belgium on September 30, 1931, with Baron de la Rouche ON4HM. To commemorate this contact, the Baron sent her a bronze replica of the Sacred Guardian Monkey of Mons. She also had a successful contact with a South African amateur in the early 1930s, using a UV199 tube fed with dry batteries, with less than 1 Watt of input power, in a portable situation.

Being an adventurous young wisp of a girl, Austine was fond of horseback riding and driving a little sports car, plus riding motor bikes. It was only natural, therefore, to take up flying. On September 6, 1933, she became the first woman admitted to the Royal Australian Air Force Radio Reserve, the training for which included flying around in a Wapiti biplane. This plane, although old, was very solidly constructed and was used extensively to train both pilots and radio operators, with the pilot in the front cockpit and the radio instructor and pupil in the back cockpit. With these cramped conditions, the student virtually had to sit on the instructor's knee (lucky instructor!). The main requirement for flying in these conditions was to stand up when you landed. Otherwise, if the landing was bumpy and you were sitting down, you could crack your skull on all the gear.

Austine was most upset that they would not send her to the war zone as a radio operator in one of the planes, just because she was a woman, but despite other commitments during WWII, she spent a lot of her spare time at the WIA on a volunteer basis, instructing service personnel and others in the art of Morse code. It was not unusual for Austine to take them into her own home for free private tuition so that they could pass their exams.

After WWII, Austine maintained her interest in amateur radio, with a particular interest in DX. One of her most interesting contacts was in 1957 with Michael FO8AP/MM, on the ill-fated Tahiti Nui raft expedition between Tahiti and Chile. This expedition ended up 600 miles short of Chile when the raft broke apart after a week of storms. Michael was using a transceiver with 1 Watt of input power at that time. Can you imagine trying to send SOS, plus your position, on a raft of 20-inch logs that are breaking apart in the middle of the ocean with 30-foot waves pounding down on you? That would definitely take a steady hand on the key.

CW is a mode at which Austine has remained very proficient, proof of this being



Austine Henry VK3YL.

her entry to the DXCC Honor Roll as the first and only Australian YL to gain this achievement, but this is only one of Austine's many firsts in the field of amateur radio. Up until 25 years ago, Austine was using only a 40-meter Zepp antenna, graduating to a half-wave centered dipole, but in the last few years she has upgraded her antenna system to a triband beam. Her transmitters have graduated from home brew, to converted surplus WWII equipment, to these days, when she is using Drake equipment.

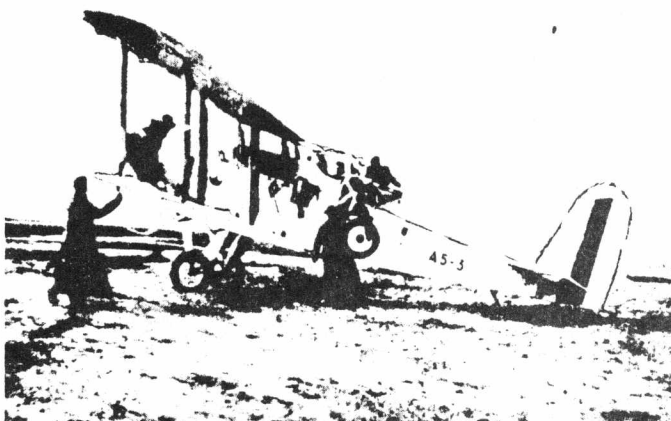
Austine is quite proud of some of her earlier award achievements, some of which are: the first to work WAC-YL, Certificate No. 22 for the YL-DXCC from Canada (hand-printed in gold), and from Heath-

er Mitchell VK3AZU (the designer of the Alara award), a certificate for being the first VK YL to receive this award.

Those are only a few of the various awards Austine has to her credit. She is also a foundation member of Yasme, winning Certificate No. 7 in the prestigious Yasme award, one in front of the famous Don Wallace W6AM who got Certificate No. 8 in 1980.

What more can be said about a woman who, after 54 years of amateur-radio operating, is still heard in the pileups, keeping her operating techniques in CW and SSB sharp, just in case there comes on the air one of the four countries she still needs to have worked the lot.

88s, Austine!



Point Cook, 1933: The Wapiti in which Austine 3YL/3D6 made her flying debut. (Picture given to her by Jim 3NY/3B6.)

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.

SATELLITE INFORMATION.

There is a mass of information now available to those who are interested in this particular sphere of amateur radio, and it would be quite possible to fill "QRM" every month with just this aspect of our hobby. In order not to waste space by publishing items of limited value, or on the other hand, to avoid missing out news that would be widely appreciated, we would like your views on exactly what a "Satellite Information" section should include. No response will probably mean that, being left "in the dark", we shall use our space in other ways.

T A R C 1985 H A M F E S T.

STATEMENT OF RECEIPTS AND PAYMENTS.

<u>RECEIPTS</u>	<u>£</u>	<u>£</u>
Convention Raffle	805.00	
T A R C	549.70	
Profit on Dinner	<u>48.50</u>	1403.20
 <u>PAYMENTS</u>		
Raffle Prizes	664.00	
Insurance	236.48	
Hall Hire	150.00	
Cocktail Function:		
Drinks	193.00	
Food	472.00	
Morning & Afternoon Teas	47.70	
Promotional Materials:		
Printing	265.00	
Name Tags	9.80	
Advertising	100.80	
Video Hire	20.40	
Display Boards	46.43	
Sundry Materials	<u>65.10</u>	<u>2270.71</u>
Amount refunded from W.I.A.		867.51
		<u>1403.20</u>

WOULD ALL ASPIRING CONTRIBUTORS TO "QRM" PLEASE NOTE THAT THE EDITOR'S CLOSING DATE FOR COPY FOR THE SEPTEMBER ISSUE WILL BE FRIDAY, 30th. AUGUST.

THE AUSTRALIAN NATIONAL AMATEUR RADIO TELEPRINTER SOCIETY, (A.N.A.R.T.S.) is a non-profit organisation, which helps promote radio teletype and other narrow band modes, including RTTY, AMTOR, ASCII, FAX and SSTV, and now also helping promote Packet Radio, using the popular V2 protocol.

A.N.A.R.T.S. is the main voice in Australia on narrow band modes. It has been promoting and helping many fellow amateurs to get on the air etc., since it was formed in 1976.

A.N.A.R.T.S. through its club callsign VK2TTY and RTTY repeater VK2RTY in Sydney, radiate a regular weekly RTTY broadcast. The time and frequencies are on Sundays at 0030 UTC and 0930 UTC, on the 80M, 40M, 20M and 2M bands. Some items transmitted on the broadcast is DX news, current events and contests, satellite reports, Ionospheric reports, news from other clubs etc. In addition to the broadcast we have a club quarterly newsletter to members, with interesting news from near and far, FREE adverts for amateurs, advice on suitable equipment, projects and rainy-day contests etc.

Help is given and encouraged for those interested to assemble their own gear. We have a variety of project boards including, DEMODULATORS, MODULATORS and POWER SUPPLIES. All the boards come with circuit diagrams, parts lists and full documentation on assembly, mostly for around \$10.00.

For membership, or any enquiries including a S.A.S.E., write to The Secretary, A.N.A.R.T.S. P.O. Box 860 Crows Nest, 2065 N.S.W.

JIM (VK3YJ) on C.B. (with acknowledgments to "73")

CB RADIO

CB radio has been both a blessing and a curse to amateur radio in Australia. It started with the truckers in the Blue Mountains of New South Wales (VK2), where it was put to good use as a safety device on the narrow, steep hills, but with the showing of the film *Convoy*, all of the rest of Australia became aware of what was to become a loss of 27 MHz to amateur radio in Australia and a headache for our Department of Communications, but a boom for amateur radio.

With the interest created by CB, it did not take long for people to realize that with ever-increasing chaos on 27 MHz, there had to be something better in the field of communications. It is here that both the Wireless Institute of Australia and the DOC, to their credit, got together with the result being a Novice class of amateur license.

To pass this, you had to answer a 50-question, multi-choice paper on relatively easy electrical laws, operating procedures, and basic radio theory. You also had a 30-question paper on rules and regulations (multi-choice). Your CW test was at 5 wpm, send and receive.

If you passed this exam, you were allowed to operate both SSB and CW on a section of 10, 15, and 80 meters, with a maximum power output of 30 Watts PEP. A few countries have been thinking of also

introducing a similar Novice-class license and, going by the upsurge in amateur radio in Australia, it would be a good thing, as by until the advent of CB and the Novice-class license, the amateur-radio scene in Australia was virtually stagnant.

As an example, going by WIA membership (which has remained at approximately 60% of the total amateur population), from 1963, with 3,500 members, to 1973, there was an increase of 1,000 (28%), but by 1983, with the advent of CB and the Novice license, there was an unprecedented upsurge in new amateurs and membership was 8,500. That represented a 53% 10-year increase, nearly twice that of the previous 10-year period.

However, like everything else in life, you get nothing for nothing. The cost to the amateurs so far has been the loss of the 27-MHz band and, with retailers down here now quite blatantly advertising CBs with a frequency coverage of 26.965 to 28.805 MHz in 5-KHz steps, how long before we also lose 28 MHz?

"It will never happen," I hear the old timers saying into their 807s, but the CB fraternity in Australia now legally has 40 channels and no restrictions on antennas (six-element beams are quite common) plus freely-advertised linear amplifiers of up to 600 Watts output for 27 MHz. What happened to the legal limit of 12 Watts PEP for CB? The CB operators in Australia also enjoy a section of the UHF band quite legally, with access to repeaters and, be-

lieve it or not, freely-advertised linear amps for UHF.

I would not be surprised if in the near future, due to our archaic import and resale laws in Australia, 14-MHz sets appear for resale, as it is quite legal to import and retail any type of equipment providing it is not dangerous to health or does not interfere with emergency services. A CB operator can quite legally buy himself an FT-902DM with an FL2100Z linear, connect it to his 6-element monobander and, unless he causes interference (with a resulting visit from the overworked DOC investigator), can operate illegally to his heart's content.

That is the negative—but worth thinking about—side of the CB input to amateur radio in Australia.

The positive side has many pluses. It is not unusual to hear on the CW section of the Novice band a couple of Novices rattling away on CW at 20 wpm; some are even faster. These speed merchants on the key usually are ex-service signal personnel or postoffice telegraphists who, over the years, have forgotten all about radio but, with the advent of the Novice license, have found that with a little study on solid-state basics, they can get back into the communications field. As most of these gentlemen are now retired, they tend to study and get their full-call license. The result is that many ex-signal ops of the various services during WWII

now get on the air with their own net frequencies to chew the fat about old times.

We also have the lifetime SWL who could not pass the previous license test for the full call, but now, due to the Novice license, with a bit of study is able to transmit to stations he has logged as an SWL over many years.

In conclusion, due to the upsurge of CB radio we have had both gains and losses, and only time will tell if it has been good for amateur radio in Australia. I do personally feel, however, that with the advent of the latest toy, namely a cordless telephone with a 9-km range (together with other as-yet-untested frequency damaging devices being imported into this country), we may suffer an unprecedented interference problem on the amateur bands and commercial frequencies.

The extent of such interference could be such that the Department of Communications (DOC) may have some difficulty in controlling it, as in past instances with 27 MHz. There is some ray of hope, however, since at this very moment a new Act of Parliament (*Radio Communications Bill*) is in the final stages of debate and is expected to pass the Senate shortly. When this occurs, the Department of Communications will have little difficulty in obtaining a prosecution against illegal operations, since the mere possession of transmitting equipment without a license or just cause will be an indictable offense.

HOBBY ELECTRONICS

477 NELSON ROAD,
MT. NELSON 7007
Telephone (002) 23 6751



FRG8800

General Coverage

Continuous coverage from 150KHz to 30MHz. Two speed spin tuned VFO plus keyboard plus computer interface control.

All mode

The FRG8800 demodulates SSB (USB & LSB) CW, AM (Wide and Narrow) and FM narrow as standard. This, complemented by an all mode squelch, produces the most practical receiver available. The FM narrow is useful for 10M, CB and for VHF with the optional VHF converter.

Memory

The FRG8800 comes fully equipped with twelve memories programmed and scanned at the touch of a single button. Any of the memory channels will accept a frequency within the whole range of the receiver including the VHF range (with the optional VHF unit). The mode is also stored in the memory eliminating the need for inconvenient manual mode change, when hopping from one memory to the next.

Selectivity & Sensitivity

Four filters are fitted as standard (SSB/CW, AM, AM-NAR and FM-NAR) with bandwidths chosen for optimum performance, these combined with switchable AGC and variable tone control provides maximum enjoyment despite today's crowded bands.

High input sensitivities are obtained by the latest in RF stages, making the most of inefficient aerials and difficult locations, and a continuously variable RF attenuator control overcomes problems encountered with very powerful stations.

LCD Display

The back-lit green LCD display incorporates easy to read 'any angle' 10mm digits.

A twelve function display indicates the transceiver's status at a glance. It includes memory channel number, mode, and frequency to a resolution of 100Hz. Also included is a two dimensional LCD, graphical SIMPO and 'S' meter, which is conventionally calibrated at 1-5 and 0-9, +20dB, +40dB, +60dB respectively.

Keyboard

A 12 button keyboard is fitted as standard allowing quick accurate changes of frequency and band (MHz and KHz programmed individually). The keyboard also has nine control buttons to allow rapid changes from memory to VFO, memory to memory and VFO to memory. Memory channels can also be recalled at the turn of a knob, ideal for storing calling/working channels or broadcast reception.

The keyboard is complemented by an opto-coupled, two speed, VFO drive: fast for rapid tuning of a band or slow for accurately tuning in a signal. In addition a fine tune control compensates for drift in the received signal. The dial can be electronically locked preventing accidental change in frequency.

Clock/timer

Dual accurate 12 hour clocks, with AM/PM indicators are ideal for log keeping (GMT/Local). The clock uses the main digital display and features full back-up facilities in the event of a mains failure or disconnection. The timer can activate the receiver or tape recorder via the relay contacts provided. A snooze facility allows up to 59 minutes of listening.

VHF Converter (optional)

The FRV8800 extends coverage to include 118-174MHz all within the main frame, thereby allowing monitoring of: PMR, marine and air bands, as well as 2M.

The FRG8800 is operated as before via the keyboard or VFO, and the memory still holds any frequency and mode. The actual VHF frequency is displayed on the main LCD to a resolution of 100Hz.

Worldwide

At 6.1Kg (excluding converter) the FRG8800 is ideal for taking on any trip. The power supply is easily adjustable from 240-220 VAC to 110-120V, 50/60Hz mains and 12VDC operation is available as an option.

SPECIFICATION

FREQUENCY COVERAGE:

150KHz - 29.999MHz
118MHz - 173.999MHz*

FREQUENCY RESOLUTION:

100Hz (Digital Readout)

FREQUENCY STABILITY:

<± 300Hz in 30 mins after 1 min on
< 50Hz in 30 mins after warm up

MODES OF RECEPTION:

AM, CW, FM NB, SSB (LSB/USB)
A3E, A1A, G3E, J3E

SELECTIVITY:

SSB/CW (J3E/A1A):

2.7KHz @ -6dB, 8.0KHz @ -50dB

FM (G3E) narrow:

12.5KHz @ -6dB, 30KHz @ -40dB

AM (A3EH3E) (standard/narrow):

6.0KHz @ -6dB, 15KHz @ -50dB

2.7KHz @ -6dB, 8KHz @ -50dB

SENSITIVITY:

SSB/CW (J3E/A1A) @ 10dB S + N/N:

<0.4uV into 50 ohms, 1.50-30MHz

<3.0uV into 500 ohms, 0.15-1.6MHz

<1.0uV into 50 ohms, 118-174MHz*

FM (G3E) @ 20dB S + N/N:

<1.0uV into 50 ohms, 1.60-30MHz

<2.0uV into 50 ohms, 118-174MHz*

AM (A3E) @ 10dB S + N/N:

<4.0uV into 50 ohms 1.60-30MHz

<3.0uV into 500 ohms, 0.15-1.6MHz

<10uV into 50 ohms 118-174MHz*

SQUELCH SENSITIVITY:

SSB/CW (J3E/A1A):

<2uV, 1.60-30.0MHz

<4uV, 118-174MHz*

FM (G3E):

<0.5uV, 1.6-30.0MHz

<1.0uV, 118-174MHz*

AM (A3E):

<2uV, 1.60-30.0MHz

<4uV, 118-174MHz*

AUDIO OUTPUT:

1.4W in 8 ohms internal @ 10% T.H.D.

4-16 ohms external speaker/phones

Constant level line output (recorder)

POWER REQUIREMENTS:

100/120 220/24V @ 50/60Hz

35VA Rx, 5VA standby

12VDC (nominal)*

1A Rx, 0.020A standby

DIMENSIONS (Ex/Inc projections):

335/350 W, 120/130 H, 235/270 D, mm

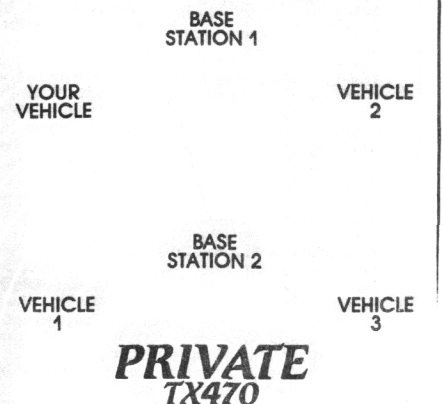
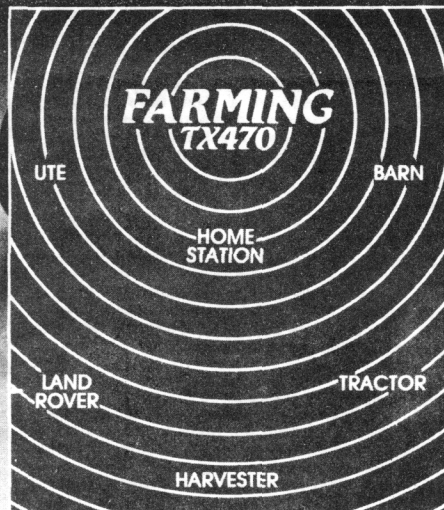
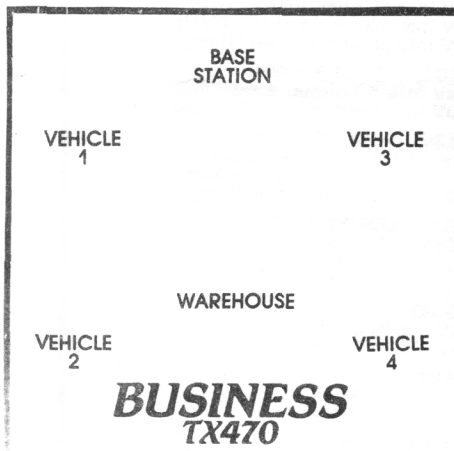
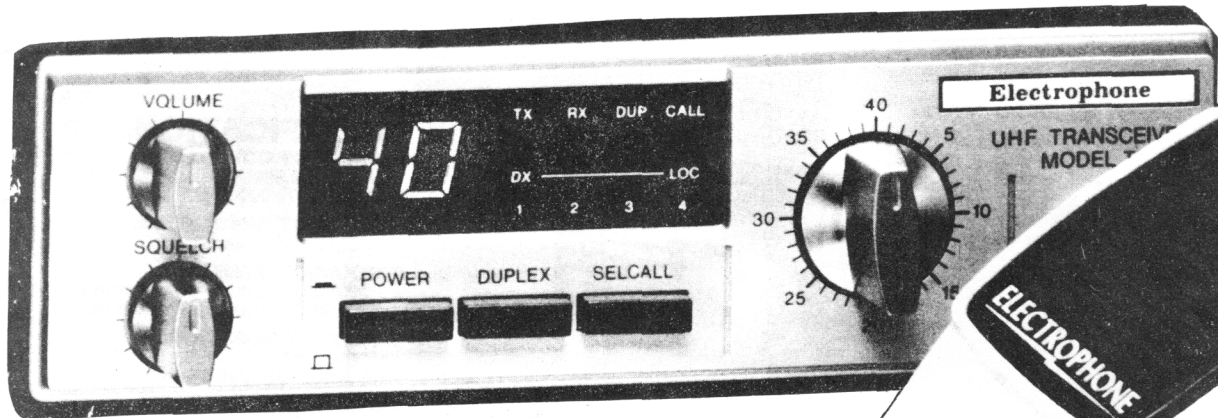
Weight 6.1/6.3Kg (w/o, c/w VHF unit)

* OPTIONAL UNIT

WANTED: One FT7 or TS120V or TS130.
Please contact the address above.

INTRODUCING

Electrophone::: TX470



wherever you drive, work, live...
TX470... THE ULTIMATE IN TWO-WAY RADIO

Electrophone TX470 UHF 2 way radio brings you your own high quality, professional communication system. The TX470 has been especially designed for Australia's harsh environment, by Japan's leading communication company.

The TX470 incorporates the exclusive Electrophone Interference Shield ... giving you crystal clear reception. Reception that is free of interference from motor ignition, electrical apparatus, or nearby transmissions.

Electrophone:

AVAILABLE FROM GEORGE HARVEY ELECTRIC PTY. LTD.
76, York St.,
Launceston, 7250
003.316533

162-4, Argyle St.
Hobart, 7000.
002.342233