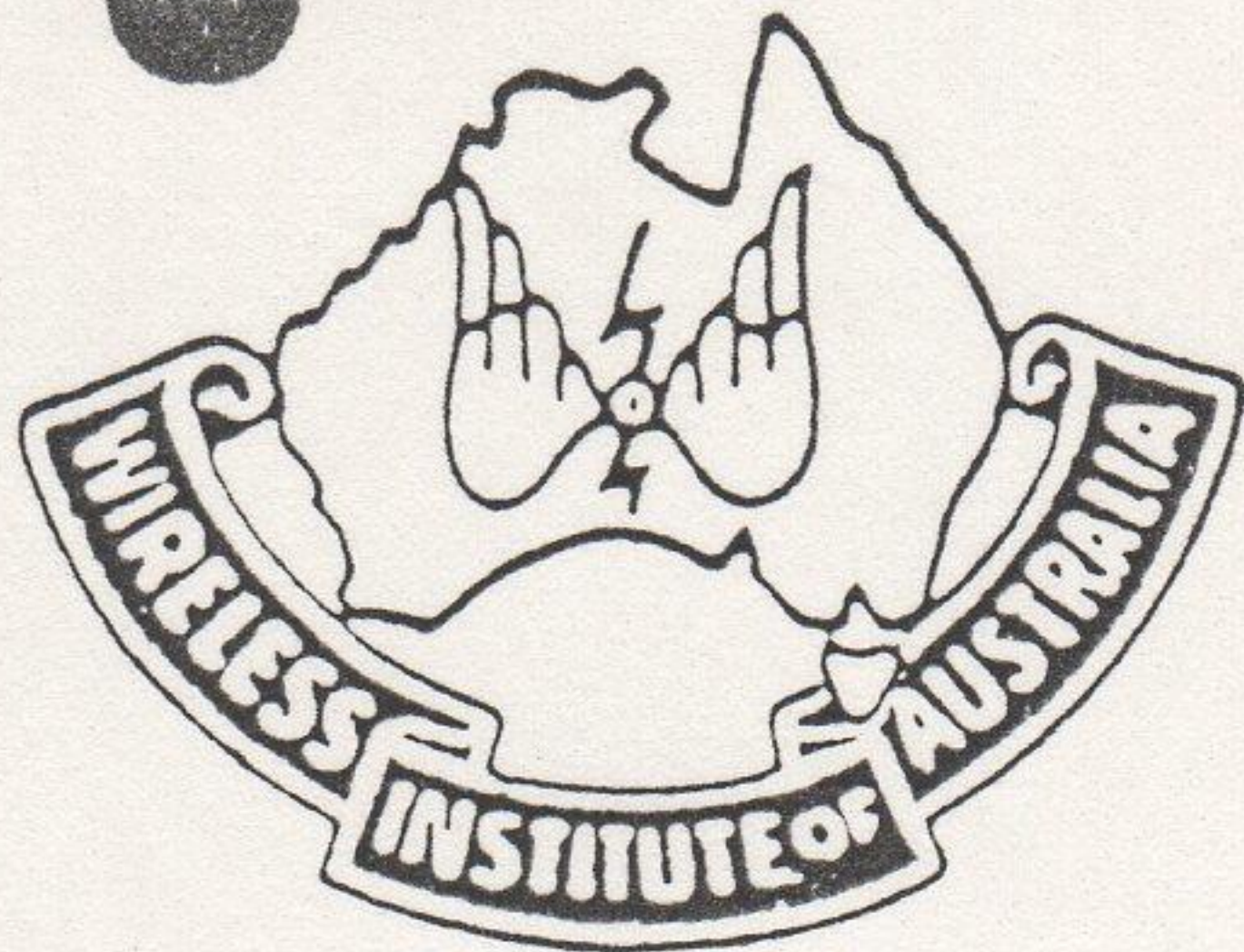


QRM

Amateur
Radio
News



NOVEMBER 1985

Issued by the Tasmanian Division of
the Wireless Institute of Australia

Radiotorial Comment

This months editorial was prepared in 1960.
25 YEARS later it is still as valid today.

AMATEUR RADIO IS OUR HERITAGE

Words which might well be termed the Magna Carta of the Amateur Transmitter were once spoken in the House of Commons, words which set a precedent for which Amateurs throughout the Empire should be eternally grateful.

They were spoken in the year 1904 by the late Lord Derby, who as Postmaster-General during his second reading speech, brought about the first Wireless Telegraphy Bill. His words are worth recording for posterity because without his positive and futuristic outlook, Amateur Radio might never have been.

He spoke these words:

"The class with whom I have the greatest sympathy," he said, "are those who wish to go in for experiments in the science of wireless, and I have been able to frame a clause which will give absolute freedom in that direction, merely requiring registration on the part of those who wish to engage in experiments. In a matter of this description the House will doubtless desire that the Act should be administered as liberally as possible, and I shall certainly do my best in that direction. For what it is worth, I will give an undertaking that no request for a license for experiments be refused unless the refusal has been approved by me personally."

This delightfully simple state of affairs did not, of course, prevail, which in these modern times is quite understandable. But it was this legislation which gave to the then technically minded people the opportunity to conduct the early experiments from which Amateur Radio was born; and from then on it was the Amateurs who lead the way in proving that world-wide communication was not only possible but offered to the commercial world an unbelievable medium for communication.

For those generations which followed, "wireless" was an accepted part of living in the same way that the generation born today will accept television and other marvels of the current scientific age. And yet if we look backwards and realise the advancement in only fifty years of wireless and its allied fields, we can most certainly say that we have only touched on the possibilities of the future. Lord Derby envisaged the possibilities when he liberalised the first Wireless Telegraphy Bill so that technically interested people could experiment unhindered by regulations. Regulations were, of course, ultimately necessary, and as far as Amateurs are concerned experimenting is confined to the bands above 30 Mc. Nevertheless, Amateurs have proved their worth in the bands below 30 Mc. in a manner not thought about in 1904, and with more liberalised thinking on the part of those who administer the current Wireless Telegraphy Act, the Amateurs can go on being of service to Australia in many fields other than experimenting as it was known in the era at the turn of the century.

We have a heritage which, because of our relatively limited number, becomes clouded by the overwhelming contributions to our science by instrumentalities with unlimited financial resources. Our heritage is something for which we can be justly proud; a heritage worth fighting for. Let us all remember that we have it in our own hands to contribute something in the overall picture, and we should never let anyone forget it.

FEDERAL EXECUTIVE.

SO YOU WANT TO CONTACT THE EDITOR?

READ THISREAD THISREAD THIS.....READ THIS.

Hey, what's going on? Well, your usual Editor thought unless he specially drew your attention to this paragraph, you wouldn't bother to read it - see the Editorial. The fact is that the Editor won't be available for the next couple of months - he's doing a marathon swim round waterlogged Britain. SO - please send all that copy to Peter, VK7ZPK, QTHR and tel. no. 438791 (002). He also joins in on 2m. most afternoons. Let him have your news, articles, comments and letters, and double the size of QRM before your rugged-up and wellie-booted Editor returns.

WOULD ALL ASPIRING CONTRIBUTORS TO QRM PLEASE NOTE THAT THE CLOSING DATE FOR COPY FOR THE DECEMBER ISSUE IS FRIDAY, 29TH NOVEMBER

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 wishes to take up this offer, please contact the Editor.

SOUTHERN BRANCH ACTIVITY NOTES

NOVICE AND CW TUITION

CW classes are progressing. Rai VK7VV is working on a training tape which should be available in the near future.

Novice theory classes. Commencing date will be FEBRUARY actual date will be advised later.

VALVES REQUIRED

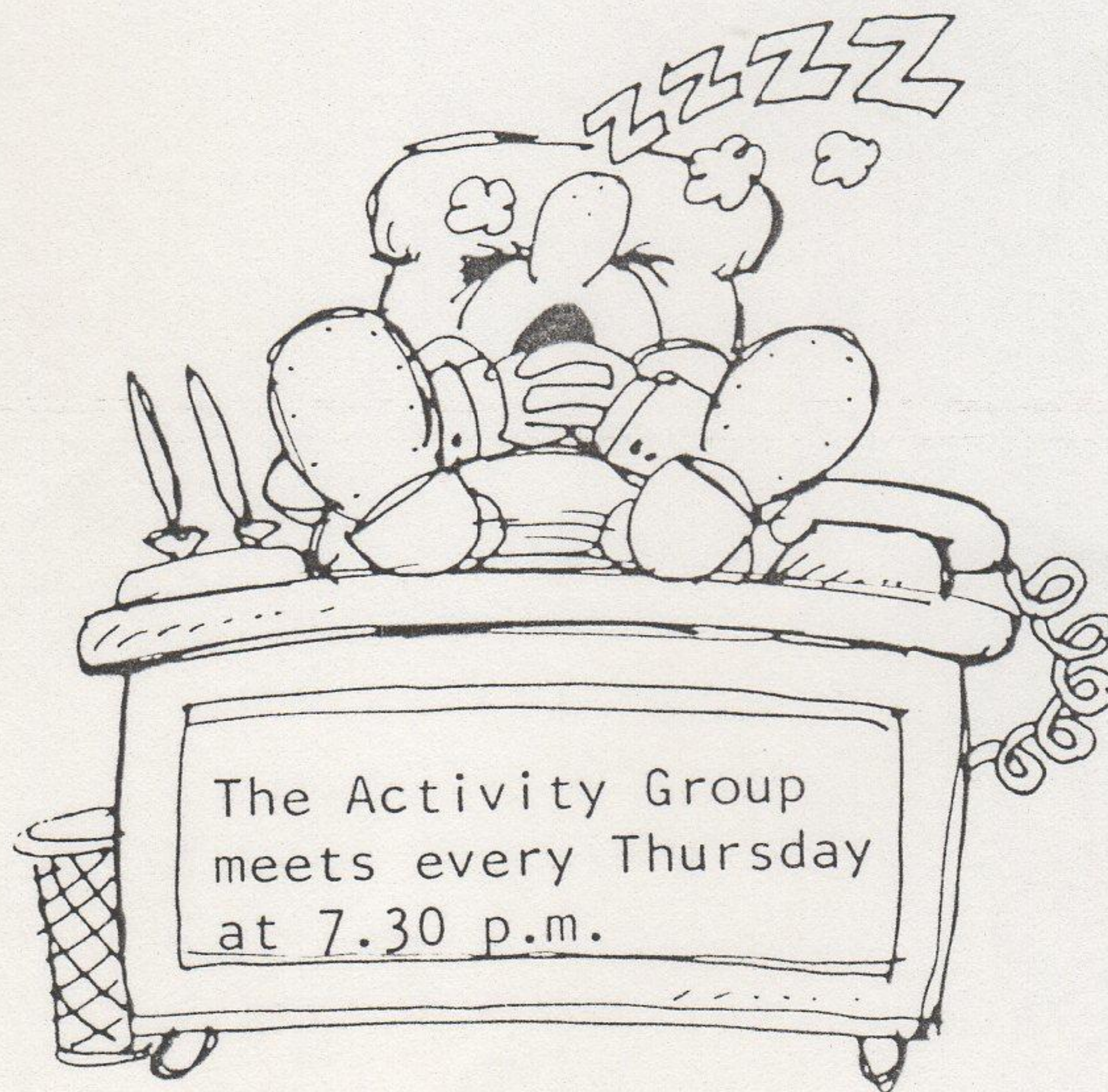
The SBAG needs 3 only 6JB6 valves for installation in the centres Drake TR4 station rig - Please contact Rai VK7VV with good news.....

CONVERSION NOTES

The Southern Branch Activity Group has available some AWA MRT 25A and PYE PREMIER low band transceivers suitable for conversion to 6M amateur band.

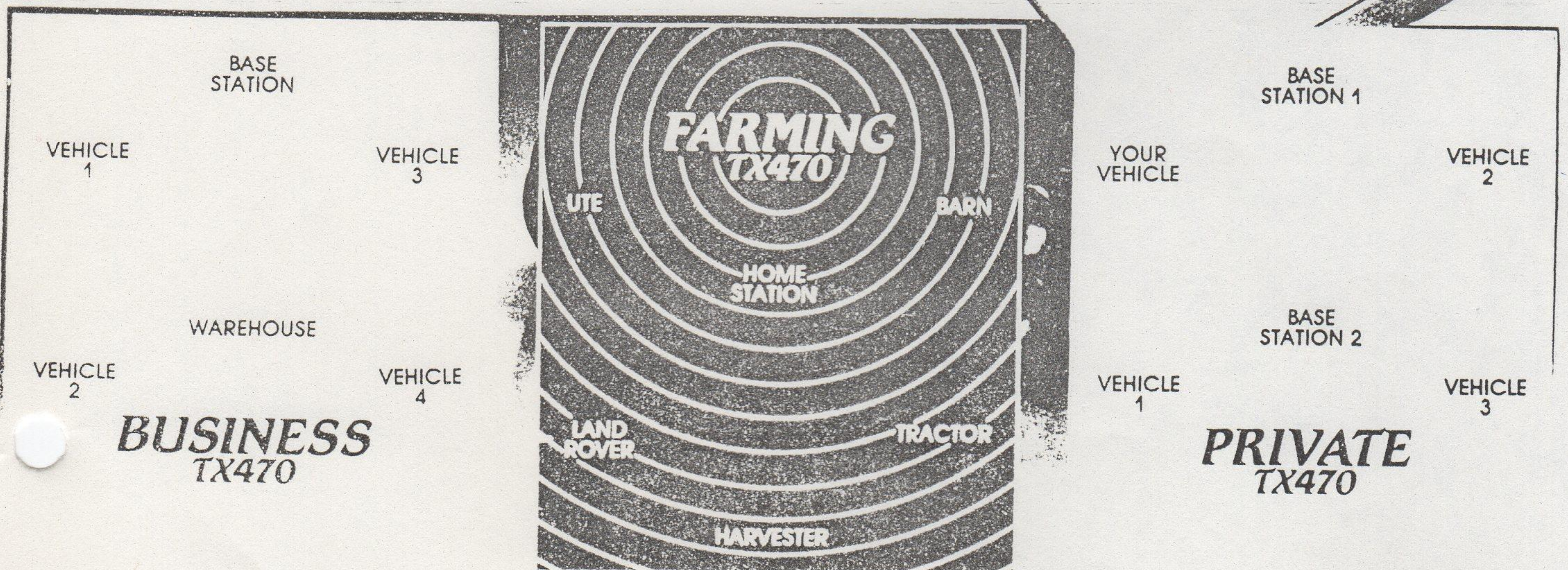
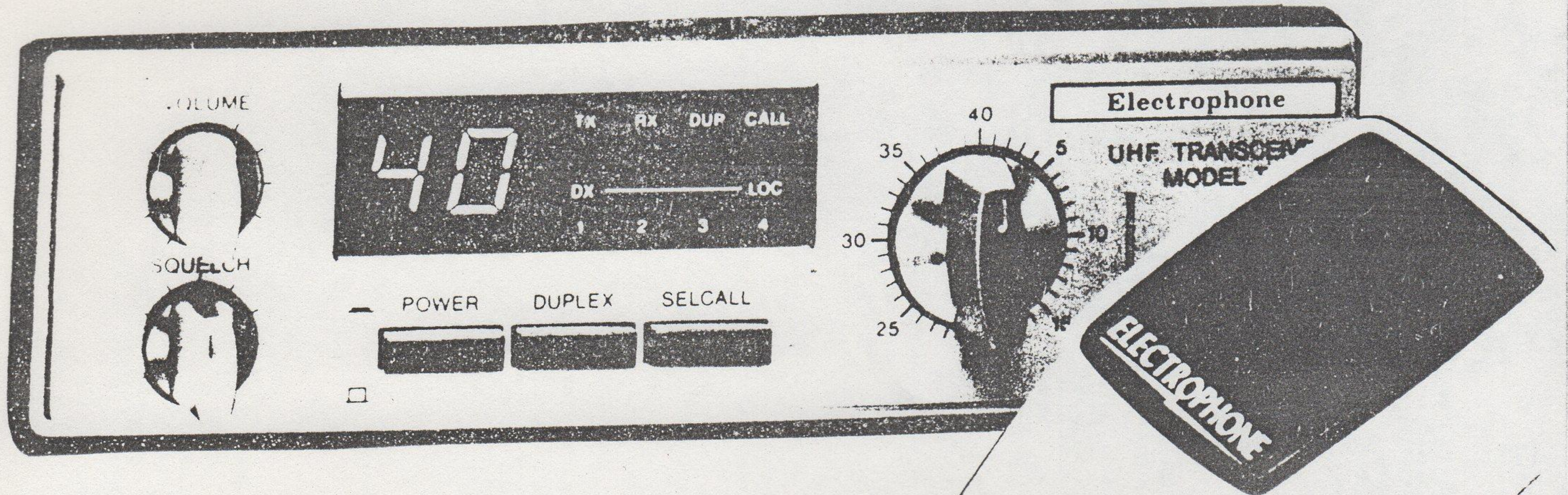
CRYSTALS

The SBAG is collating an order for crystals for both 6 & 2 metre conversion. Amateurs wishing to take advantage of ordering crystals in a bulk order are asked to advise Mike VK7ZML, Russ VK7ZRP or leave a note at Newtown Rd. Note if the crystals you require have special properties please write these down.



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:

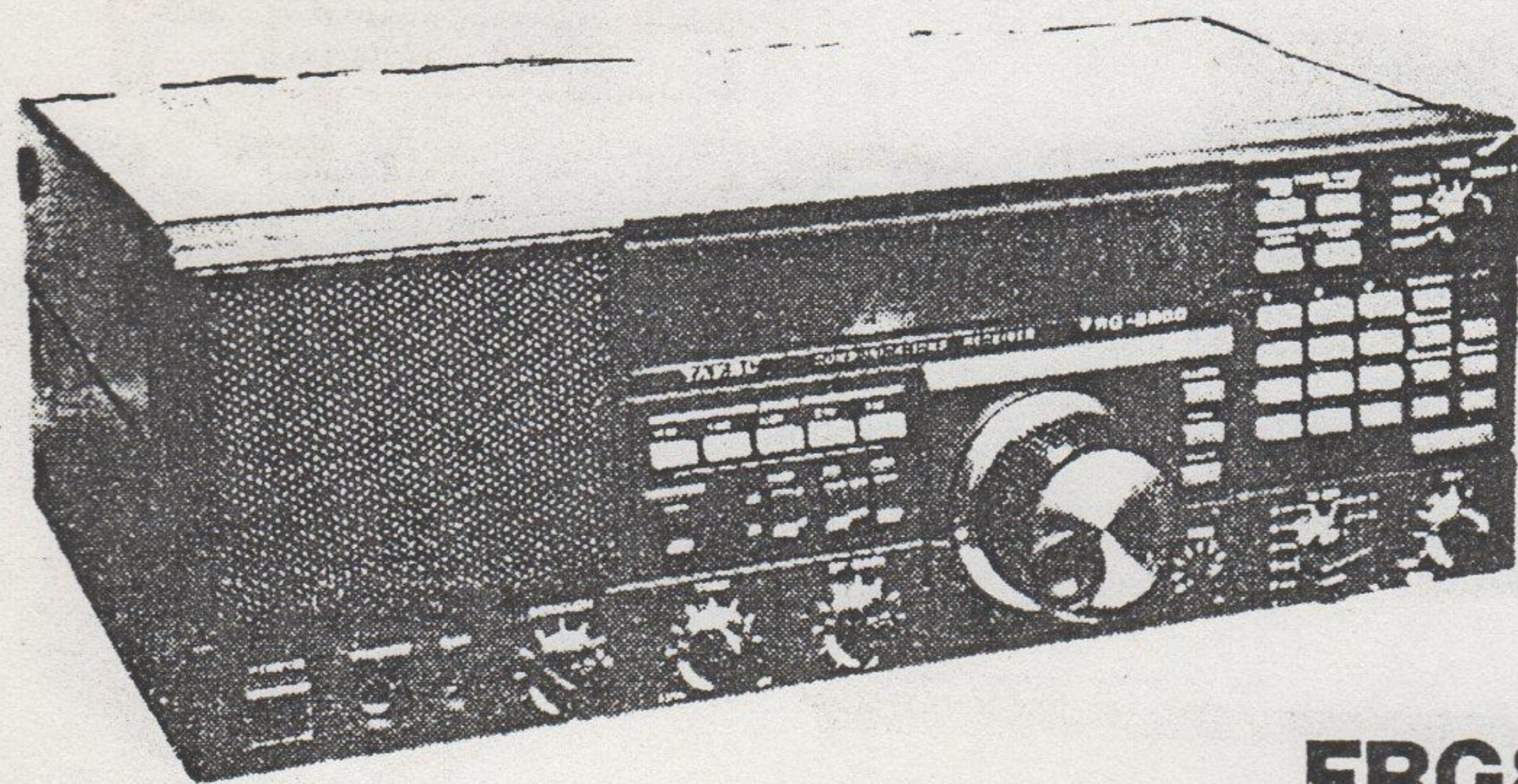
AVAILABLE FROM GEORGE HARVEY ELECTRIC PTY. LTD.

70, York St.
Launceston, 7250
03.225533

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

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 best 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, -50dB 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 (A3E/A3E) (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.