



Bulletin issued by the Northern
Branches of the Wireless Institute
of Australia, Tas. Division.

March 1975
Vol.4 No 11

P.O. Box 1010
Launceston
Tas. 7250

Registered at GPO Hobart
for transmission by post
as a periodical. Category B.

Price 40¢

MEETINGS

- March 11th North West Branch, Lakins Hall, Ulverstone.
March 14th Northern Branch, A.E.B. rooms, High St.
March 15th Council meeting at the QTH of Reg VK7KK,
New World Av. Trevallyn.

YRCS

- March 22nd room 38, Kings Meadows High School.

Mini Hamfest

- March 9th Port Sorell (Northern Branch to WIN the cricket!)

Contests

- March 8-9th BERU CW
March 15-16th ARRL DX CW
March 29-30th CQ WW WPX SSB

Northern Notes by Reg VK7KK.

Our meeting in March will be our Annual Meeting and election of officers. Your support and prior thought is most necessary, give a few minutes now and decide who should be entrusted with the major positions in the branch and make sure before you attend the meeting that you have some ideas on those who would best fill positions.

Since this meeting will also have a talk by John Hodgson on Modifications to TV transmitters for colour, the meeting is scheduled for 7.30 p.m.. This talk promises to be usefull and interesting and will be pitched to interest the average member rather than the professionals. John Hodgson has been responsible for upgrading channels 2 and 3 transmitters to enable them to satisfactorily cope with colour signals.

February's meeting attendance was back up to normal. We were pleased to welcome one visitor Alan. Ed Bovis VK7ED gave an interesting talk on his "sea-faring experiences as a Sparks" in the immediate post First-World War era when spark transmitters and four masted schooners were the in thing. There seemed to be as many interesting moments on the shore as on the ship. Apparently the ZL telephone girls are still as cooperative! Thanks Ed for your most instructive talk, it does some of us who weren't around in the "spark" era good to hear of your problems in earlier times.

Most have probably heard by now that we have to pay for electricity used by the repeater. The meeting agreed to meet both the \$30.00 p.a. charge for H.E.C. service and the \$33.00 extra for the emergency power source.

It appears that we will still be able to use the A.E.B. rooms for the meetings this year. The possibility of no room being available hasn't arisen but we're being requested to ensure the room is left as we find it as no cleaning staff will be there before Monday.

No more news on the clubroom investigation. As soon as the committee feels that we have a clear indication as to what the council will be willing to allow us you'll be asked to give your opinion. The committee members aren't committing us to anything and are just following through a suggestion for your consideration.

The Annual Port Sorell do is on March 9th this year. The North West Branch are organising, all we have to do is attend in the usual large numbers.

Three members sat for the AOCP exam recently, Best of luck and we hope to hear some new calls soon.

YRCS classes this year are likely to begin on March 22nd at Kings Meadows High School. If you know of any likely starters lets hear their names.

March 1975

Q.R.M.

Page 3

North Western notes by Max VK7MX.

Our monthly meeting was a lively affair. It was obvious that when the cat's away the mice play and this seemed to be the case as our President Tony was holidaying on the mainland. Sid VK7SF took the chair and had some difficulty in keeping order. However he persisted and handled the business very well.

We were pleased to learn that our worthy secretary had not forgotten the January meeting, but apparently the bloke he advised that he couldn't make it had forgotten to tell us. Fair enough David.

A great deal of discussion took place concerning the annual mini hamfest. After some detective work it was agreed that it was our turn to organise it this year and so Port Sorell was chosen, being the most central. It was fixed for March 9th so roll up chaps and ladies for another fun frolic at Port Sorell. If you have any brain waves (on any frequency) kindly pass them on to Graham VK7ZAQ who is master of ceremonies. The main thing is to be there. It's North's turn to win the cricket so roll up N.W. and see that they dont.

It was reported that there is satisfactory interest in the Radio Instruction class and subsequently the next session went off O.K. VK7ZJS was most voluble on some aspects of the instruction but played a hard part getting his ideas across. Cheer up Bob, nobody believed Einstein at first.

As most of you know we have had phenominal VHF openings this month. Our area has certainly had its share and direct contacts with VK3 and VK5 have been plentiful.

Apparently Tony VK7AX had some experience with mainland VHF and was somewhat critical of the attitude over there. However this is the friendly State, so lets keep it that way.

Fred VK4RF was loud in his praises of VK7 hospitality, and went home happily with a clay brick as a souvenir. Sounds a bit weird.

Burnie is certainly coming into its own on VHF. They now have VK7KH, CF, ZDW, ZBL and ZJS on air and all the coast can communicate.

We were pleased to have Joe VK7ZGJ, Phil and harmonic drop in during the month whilst holidaying at Hawly Beach.

A lot of hams have been dropping in lately and I suspect its caused by the heavy crop of peaches ripening outside.

See you next month

Max VK7MX

DX Notes by Den VK7DK.

Coming events. ZS1ANT & VP8HZ have been licensed to operate from Bouvet (3Y) sometime this month, providing transport can be arranged. 3B8DA is reported to be heading for 3E7 land shortly. Both these will be difficult with the sunspot cycle as it is. VS5MC is trying to arrange a visit to one of the small islands in the Spathy group. April operation is intended for Cocos Island, TI9. FR7, Glorioso Island may be expected during July. From listening on the band it seems that most of these fellows are all having transport problems.

VE6's in Calgary are using the prefix CY6 during this year. This is to commemorate the Calgary Centenary. An award is to be issued to overseas stations working ten CY6 calls. CY6NQ & CY6AO are both club stations and will count double. Logs to be sent to P.O. Box 592, Calgary, Alberta, Canada. Zip code is T2P2J2.

An unusual call on the bands is PA700ASD. This is to commemorate the 700th anniversary of the city of Amsterdam.

40 metres has had its share of DX, the following heard on phone, at 1130z. JA, FB8YC, UA3FGM, and W's. CW at 2000z, DK4PT, UB5QBG, K2LWR, DJ4XJ, YO9DQ, YU2RUV, YU3DPI, KV4AA, and UD6DHU. This from one night's listening.

On 20, VU7GV has been quite active from Andaman Isl, around 1200z. TR888 was heard at s2 on 14235 at 2140z. He was giving the W boys s9 at the time.

Some QSL information. BV2B, PO Box 101, Taipei, Taiwan. M11, via I0EN2, HD1QRC via WA3TDY. This Ecuador station was operating high in the Andes over the weekend of 21/22 Feb.

My listening hours have been mainly to the evenings, but there has been very few openings till close to 1000z. Around 0100z, LU7MAL & LU4MBF were heard at good strength, HD1QRC was in the same time slot. OA4XX heard at 0500z.

08/1000z BV2B (Tim), KA6AA, UG6, VU2, JA, UF6, YB9.

10/1200z HS4AF, P29GA, UK7PAL, UK7LAH, 9M2ML, 9M2GJ, YB0ABV, YB0AH, 4S7DA, BV2V, VU2BY, VU2DZ, SM2CEW, UK2RAE (Estonia), LA3FD, VS5MC, VS5JC, VS6EK, VS6BL, XW8HJ, XW8HS, HL9KN, JY6BM, SM2DMU, DU6BG, EP2BQ, EP2PT, UA1CW, G4FF, DK6EC, OH2BLV, G3CEJ, UK5WBG, DK6RX, CR8AG, DU1NRS, YJ8EL, UI8MN, UL7LEZ, UL7BG, HM1GN, 9V1RP, 9M8NKA & VLC, UK2VAG, EP2LJ, UM8FZ, HL9TO.

12/1400z VQ9R, 4S7PB, XW8GZ, HA5KBM, DJ5WY, 4Z4, G3EFQ, G3PUT, EP2FR, A4XFT, EP2DE, XW8HJ, OH5PY, F3II, SM4DDX, SM4DHF, CR8AG, A4XFQ, 9K2, EP2MM, GW3NNF, HZ1SR(s2), UK7LAH, XW8GG, DU6CO, DJ4ZC, UW3WT, LA1K, HS2AIG, G4GI, UK2GME, OE3SFW, UK6LAZ, and a sprinkling of W's.

14/2200z VS6EK, VS6DA, JA6HK, TG9PW, YJ8EL, YB9AFT.

9K2DR or 9K2DT are hoping to get to 824 land soon, and that one is required by a lot of hams. Lets hope they make it.

Well thats all for this month gents. so 73 and DX.

DEN.

VHF notes by Joe VK7ZGJ.

"Six metres never closes, the operators go QRT" this has been said many times, listening on 52.050 you will often hear the odd word, or even half a sentence via meteor scatter, the VK2 beacon on 52.450 can be heard almost any night if you are prepared to listen.

During the weekend of the John Moyle National Field Day Contest six metres did its thing and was open to VK5 on the 8th February from 05.55z to 06.19z, then again the next day from 23.05z to 03.07z. The band being open to VK2 and 4, also VK3ZAZ was worked on back scatter, so don't switch your gear off you may miss a contact.

Two metres has also been very active with a very large High across the strait for several days at the beginning of the month.

On the 29th January VK3AQR, VK5NC and TN, VK3ZAZ were worked VK3ZAZ was also worked on 6 metres, the following night stations worked included VK5, MV, NC, VK3, TN, ZAY, ZKY and AKC, the band opened again on the 2nd February and was open all day. Daniel worked Ron VK3AKC on 432Mhz running 40 milliwatts and 5-8 signals, they then went up to 1296Mhz where Daniel used 12 milliwatts from his receiver oscillator chain normally used for tuning up converters. The band was still open to VK3 on the 3rd. This was the best opening for about 9 months.

After the meeting on Friday night 5th February Trevor VK5NC was heard through the repeater he then went to the bottom end of the band and worked VK7ZDA, 7ZAH and 7ZGJ.

On the 16th Trevor was worked again, that same day VK7PS and VK7ZIF were worked on six metres by Kevin 7ZAH and John 7JV.

I would like to hear more of the new callsigns on the tunable portions of six and two metres as the only callsigns you will hear at present are VK7's ZAH, ZDA, ZGJ and JV.

73 Joe

FOR SALE

One of the better VHF and HF DX locations in Launceston. Site goes complete with 52 ft self supporting tower, TH6DXX beam, 10 element 2 metre yagi, up 60 ft, Ham M rotator drives both. Both fed with UR67 cable. Also with the site is a 2-3 bedroom brick house, with a wonderful view and only 1½ miles from town. Large rooms tastefully decorated and recently painted inside and out. Carport and room for a workshop under. This is a Hams paradise. Price on application to VK7DK.

G2DAF receiver, complete but not yet operational, xtal locked front end, 3 half-lattice filters, Eddystone dial	\$60.00
MR6 in going order on 52.525 including xtals	\$25.00
IGL, 1Watt transceiver, including xtals for, chB, 1 and 4	\$150.00
Steve VK7OA	

March 1975

Q.R.M.

Page 6

W.I.A., Tasmanian Division, Northern Branch.

Trading Account for the year ending 23rd February 1975. Prepared by the treasurer Kevin VK7ZAH and Audited by C.G.Waldon FACA, FCI

Creditors	\$ 25.99	Debitors	\$ 69.49
To Stock	\$ 494.04	Sales	\$5438.19
Purchases	\$4250.40	Stock	\$ 628.68
	\$4770.43		
Gross Profit	\$1365.93		
	\$6136.36		\$6136.36

Profit and Loss Account for the year ending 23rd February 1975.

<u>To Expenses</u>		<u>By Gross Profit</u>		\$1365.93
Q.R.M.	\$ 70.00	<u>Other Income</u>		
Repeater	\$ 90.36			
P.O. Box	\$ 6.00	Q.R.M.	\$133.50	
7NZ license	\$ 12.00	Repeater	\$ 2.00	
Petty cash	\$ 10.00	Subs	\$ 53.50	
Rent	\$ 18.00	Ins. Comm.	\$ 24.84	
Freight	\$ 26.16	Raffles	\$ 29.38	
Cheque books	\$ 4.80	Darwin Appeal	\$ 9.20	
Ref. clubroom	\$ 469.00	W.I.A. Surplus	\$ 66.00	
Direct. entry	\$ 31.34	Interest	\$ 33.79	
Xmas BBQ	\$ 13.80	Xmas BBQ	\$ 12.65	
AMSAT fund	\$ 50.00	Cancelled Cheque	\$ 54.63	
Darwin Appeal	\$ 9.20			
Calculator	\$ 50.34			
				\$ 419.49
	\$ 861.00			
Nett Profit	\$ 924.42			
	\$1785.42			\$1785.42

Balance Sheet as at 23rd February 1975.

<u>Liabilities</u>		<u>Assets</u>	
Sundry Creditors	\$ 25.99	Sundry Debitors	\$ 69.49
Acc. Funds	\$1344.78	Stock	\$ 628.68
Nett Profit	\$ 924.42	L.B.S.	\$1597.02
	\$2295.19		\$2295.19

This Balance sheet is subject to audit.

NORTHERN BRANCH EQUIPMENT STORE.

The Northern Branch equipment store is now the Tasmanian agent for "VICOM INTERNATIONAL Pty Ltd". This means you can now order the following equipment through the store;

ICOM: IC-22 FM 10W, 146-148Mhz mobile transceiver

IC-21a FM 10W, 146-148Mhz base station

DV21 Digital VFO to match IC-21a

YAESU: FT101B transceiver

FT501 digital transceiver

FT75 transceiver

FL2100B linear

FT201 transceiver

TRIO: TS520 transceiver

QR666 general coverage receiver

KEN: KP-202 FM 2W hand held transceiver, incl. 4 ch.

SEIWA: FM 25W, 2 metre transceiver

For further information and prices contact Kevin VK7ZAH

Vicom International's POLICY:

Persons not in possession of the appropriate certificate of proficiency will not be sold amateur equipment. This may have to be produced on request. Our terms of trading are strictly net cash, no COD, no credit other than Bankcard. All equipment sold carries the VICOM 90-day all inclusive warranty. Add extra for freight or postage. Insurance cover 50¢ per \$100.00.

SPECIALS

1000 -	100K ½W resistors	1¢ each
100 -	3MM phone plugs	5¢ each
100 -	47 mfd, 10 volt electrolytics	5¢ each

INTEGRATED CIRCUITS.

1	-	LM3028 AH RF/IF amp	\$1.60
4	-	LM3046 Transistor array	\$1.60 each
2	-	7474 Dual D flip flop	\$1.15 each
6	-	7404 Hex inverter	\$0.75 each
3	-	7413 Dual schmitt trigger	\$1.90 each
5	-	741 Op. amps	\$1.00 each
2	-	7493 4 bit binary counter	\$1.15 each
2	-	74150 16 to 1 line multiplex	\$3.20 each
1	-	74154 4 to 16 line decoder	\$3.50
6	-	723 Voltage regulator	\$1.50 each
6	-	LM380 2W audio amp	\$2.50 each
2	-	7473 Dual JK flipflop	\$0.90 each
1	-	74123 Dual monostable	\$1.70
1	-	711 Dual comparator	\$1.15

Solid State 2Metre Transverter

by Ian Morehouse VK3YAY

(reprinted from "The Victorian VHFER" April 1974)

This transverter was originally published in "Wireless World", and was designed for 12 and 24 volt operation. As I required it for mobile operation, the 24 volt section was used, but with a different output transistor so it would run off 12 volts, also the 24 volt transistor was too expensive for its small output.

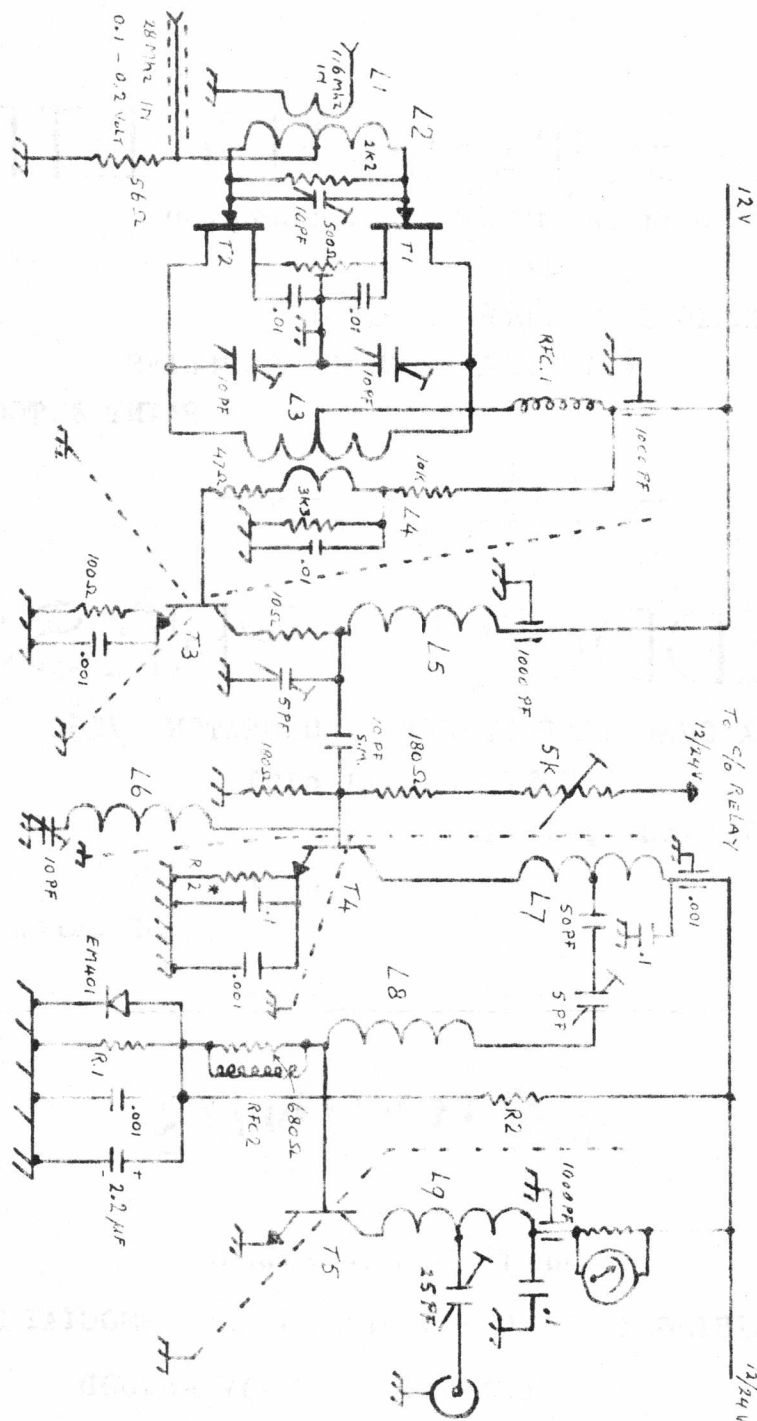
At this stage I must point out that this circuit has only been tried using a signal generator as an exciter on the test bench and as such, no speech quality on-air reports have been received, so the intending builder might have to do some further experiments or contact the author who, by the time the article appears, hopes to have his unit working (..... having troubles with the 28Mhz SSB exciter).

The mixer and amplifiers were built on the copper side of printed circuit board with the appropriate pads etched. Each stage has shielding between it and the next, again using P.C.B. You will see on the circuit that the 2N3866 driver has three shields centring on it. To achieve this, I mounted the 2N3866 under the P.C.B. so that it had very short leads and all sections could be shielded.

The oscillator circuit is not shown, but uses a 38.333Mhz 3rd overtone crystal with an MPF121 as a buffer amp and to clean up the wave shape. This is done on a separate board which originally started out as an exciter for a 2M AM rig.

To suppress the 116Mhz carrier, there is a series tuned circuit from the base of the 2N3866 to ground. This is necessary due to the low Q of the coupling circuits. Also to reduce spuri, I am going to follow the unit with a simple bandpass filter, the filter is taken from the ARRL handbook and was designed for use after a medium power FM transmitter.

Power requirement as for 28Mhz drive is about 0.1 - 0.2 V into 50 ohm, to give about 3 - 4 PEP out, adjusting the bias on the 2N3866 for best linearity.



T 1	2N3819		L1- 2T 22E. SWG pushed into L2, 1/4" Dia.
T 2	2N3819		L2- 8T 22 Tinned 1/4" Dia, 1/2" long C/T
T 3	BFY90 - 2N918		L3- 7T " " " " " "
T 4	2N3866		L4- 2T 28E SWG 1/4" Dia. pushed into L3
T 5	2N3866 } 24 volt		L5- 4T 22 Tinned, 1/4" Dia. 0.45" long
	2N3375 }		L6- 8T " " " " " "
T 5	2N5589	12 volt	L7- 5T 18E SWG 1/4" Dia. 0.4" long
R 1	51 ohm	without diode 24 volt	L8- 4T " " " " 0.3" long
R 2	1K5		L9- 5T 16E SWG 1/4" Dia. 0.5" long
R 1	100 ohm	with diode 12 volt	RFC1 any low value choke 50 μ hy $\approx$
R 2	1K		RFC2 18" 34E SWG 1/4" Dia. closewound on old style 680 ohm 1W resistor
R 2*	34 ohm	(2x68 ohm)	

J.&T. GUNN PTY. LTD.

50 Brisbane Street, Launceston.

Telephone 2 2251

DOMESTIC & BUILDERS HARDWARE

MARINE & PLUMBING SUPPLIES

PAINT & TOOLS

SEDDON PRESS

35A GRANVILLE STREET, LAUNCESTON. 7250

Telephone 31 6191

for all your printing

Business and Personal

QSL cards ****

NORWINDS

ELECTRICAL ENGINEERS

SPECIALISING IN MOTOR REWINDING AND ASSOCIATED WORK

27 SUNCREST PLACE, HAVESWOOD

TELEPHONE 391515

Athol Lawes Electrics

115 ROBERT ROAD,

KING MEADOWS, LAUNCESTON

TEL. 44319

TRY US FOR YOUR NEXT APPLIANCE

YOU WILL FIND IT EASY ON YOUR POCKET

• • •