Newsletter of the Oxley Region Amateur Radio Club Inc PO Box 712 Port Macquarie 2444

August 1998

Compiled by VK2TT

PRESIDENT: VICE. PRES: TREASURER: John McDonagh SECRETARY: David Pilley

Bruce Walker David Tarrant

VK2HOT 6583.8360 VK2HBC 6585.6381 VK2VY 6582.0020 VK2AYD 6585.2647

A few projects for the Club which will be undertaken shortly will be the setting up of a station at the SES building and getting RCN up and running.

President's Report

Well, the A.G.M. is over for another year. We have had some changes with David (VK2HBC) taking on the Vice President's position and David (VK2AYD) back into the Secretary's position. David (VK2DAL) is now the Repeater Chairman. The Davids have the majority vote it seems.

Charles (VK2FSH) has kindly offered to organise the social activities. All other positions remain unchanged.

The sausage sizzle after the meetings went well with very little of anything left over. It was a bit cold for some as I noticed quite a gathering close to the barbie.

I attended the first night of the Novice classes conducted at the Wauchope High School by Larry (VK2CLL) and was pleased to see three in attendance with two more due the following week. I gave them a short talk on the Club and the various levels of the licensing system and then left them to learn the Ohm's law.

I would like to thank Bill (VK2ZCV) for the efforts that he has put into the positions that he held in the Club. Bill, stay on standby, as you will no doubt be called upon for advice and comment on various projects and Club matters.

Well that's all folks. CUL (A packet term) on the repeaters.

BRUCE WALKER (VK2HOT) President O.R.A.R.C. Inc.

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DOWN THE COAX

SATURDAY 5TH September General meeting :1.00pm, SES Building, Gordon St., Port Macquarie.

SATURDAY 3RD October General meeting: 1.00pm SES Building, Gordon St., Port Macquarie.

SAT. 17TH/SUN. 18TH October JOTA

Silent Key

Members of the Amateur Radio Fraternity learnt, with sorrow, of the unexpected and sudden passing of Mark Brenton, VK2XFK, of Collombatti, on 12th July 1998. Mark was a member of ORARC & committee member of KADARC. He regularly operated on VHF and was a familiar voice on the VK2RPM repeater. Prior to moving to this district, Mark was involved in the hobby in Sydney, where he was a member of the St.George Radio Society. Sincere sympathy is extended to Mrs. Brenton and members of his family.

The A.G.M.

Twenty-one members attended the AGM and for those of you who were unable to attend and consequently missed out on the BBQ Sausage Sizzle, the following are the new executive, committee, and "functionaries".

President
Bruce Walker VK2HOT

Vice-President & Public Officer
David Tarrant VK2HBC

Secretary & WIA Delegate
David Pilley VK2AYD

Treasurer
John McDonagh VK2VY

Repeater Chairman David Smith VK2DAL

Equipment Officer Jason Maris VK2FT

Education Officer Larry Lindsay VK2CLL

Oxtales Editor
Trevor Thatcher VK2TT

Historians
Ian Dalrymple VK2XU
John Bailey VK2KHB

Social Director & Committee Member Charles Edmondson VK2FSH

1999 Field Day Team.
Co-ordinator
Jason Maris VK2FT
Assistant co-ordinator
Bruce Walker VK2HOT

Publicity Officer Allan Nutt VK2GD

We were pleased to see Bruce, VK2HOT continued in the HOT chair and like that special brand of paint, he seems to "keep on keepin' on".

The Treasurer reported the income for the year had been \$3622.38, Expenditure \$4849.85 and our cash balance was \$7214.70 of which \$5,000 was on Term Deposit.

Win an ICOM 706!

As an initiative to encourage more Radio Amateurs in N.S.W. to join and support the W.I.A., the division received jointly from ICOM and ATR Centre (you may recall ATR exhibited at our Field Day this year), an Icom 706 Mk II Transceiver, valued at \$2,700.

All Amateurs applying for membership of the WIA between now and 28th March 1999, will go into the draw. Application forms are available from our Hon. Sec., VK2AYD, who would be delighted to sponsor you.

- VK2AYD

Clothes Line Antenna.

The July edition of QST had a great editorial on the clothes line antenna. What is it? No, it is not a modified Hills Hoist.

Imagine (because I'm not drawing diagrams), two poles, 132 ft apart. Each with a small pulley at the top and 264 ft of wire revolving between the two. Now inject an insulator and feeder.

You can now move the feed point to any position you want. Centre for 80m, off centre by approx 25% for 40m, etc.

Now really let your imagination run riot and think of a small remote controlled motor attached to one of the pullies. You could just reel the feed point around until the antenna showed minimum VSWR... the mind boggles!

Millennium Bug Explained.

The mainboard in your PC has a CMOS hardware Chip called a RTC (Real Time Clock). This chip is powered by the computer power supply when the computer is ON and is kept running by a battery when the computer is OFF.

The RTC has 14 main registers and seven of these are used for the time and date. Each register holds a two digit binary number. Note the registers not listed below are used for other purposes, alarm settings and special functions.

Reg. 0	seconds	0-59	
Reg. 2	minutes	0-59	
Reg. 4	hours	1-12 or 0-23	

Reg. 6 day of the week 1-7 Reg. 7 date of the Month 1-31 Reg. 8 month 1-12

Reg. 9 year 0-99 When power is first applied and in 24 hour mode, after one second, the regis-

ters are set to:

$$0 = 01$$
, $2 = 00$, $4 = 00$, $6 = 01$, $7 = 01$, $8 = 01$, $9 = 00$

which equals 00:00:01 Sunday, 1st January 00. There is nothing in the chip to store the century. When power is applied as above and left applied, it will take 100 years for all the registers to return to the above values.

This chip code name MC146818 was developed by Motorola in the late 70's. It was designed as a 100 year clock. The problem it wasn't needed for the first 80 years, when put into use, in the eighties, the register 9 had to be set to 80.

These RTC chips also have a built in automatic end of month recognition and automatic leap year compensation. This means they won't accept the 30th February or 31st November the registers are adjusted accordingly.

All IBM compatible computers should have a Motorola MC146818 compatible Real Time Clock.

When your computer is first turned ON,

the BIOS (Basic Input Output System) checks your system as well as the RTC. If it finds the year as 00 what happens next will depend on the age of the BIOS. BIOS's two years or older will say it is an invalid date and set the date back to a default date of 1st January 1980. Later BIOS's have a record stored for reference to the century of 19 or 20 and accept the date as being valid.

PROBLEM NUMBER ONE.

The simplest way to test your PC for the Millennium bug is at the C: prompt.

- 1. Set the date to 12/31/199 (Note that the exact format will depend on how your computer is set up)
- 2. Set the time to 23:59
- 3. Turn off your PC and wait 2 Minutes.
- 4. Turn on your PC and check the date.

C:\date [enter](you should get)

Current date is Sat 01-01-2000

Enter new date (mm-dd-yy):

If you get Tue 01-01-1980, you have a problem. You have four options at this point.

- 1. Upgrade your computer system.
- 2. Buy a new computer system.
- 3. Buy a software programme designed to fix the problem.
- 4. In your Autoexec.Bat file enter two lines after 1st January 2000.

Time

Date

When you turn on your computer it will stop and ask you for the TIME and then the DATE. Enter the correct time and date. The time and date will remain correct until you turn your computer off.

PROBLEM NUMBER TWO.

The Leap Year Bug (chips not 100% MC146818 compatible)

- 1. Set the date to 02/28/2000
- 2. Set the time to 23:59

- 3. Turn off your PC and wait two minutes.
- 4. Turn on your PC and check the date. If you get -3/01/2000 you have a problem. Your options are the same as above.

Don't forget to return your DATE and TIME to the current date and time after you have finished testing your computer.

PROBLEM NUMBER THREE.

The hardest one to test is your software. Some software looks at the two digit year and interprets numbers below, say 30 as 2030 and above 31 as 1931. Other programs won't accept anything not in the 80 to 99 range.

The best way to approach this problem is to upgrade to a current version and make sure it is 2000 compatible before you buy. [Reprinted from MacroMax's Newsletter "Coffee Break"]

- VK2YOR

Dead Repeater

A letter in the RSGB June "Radcom" caught my eye and made me think.

It appears a local repeater went down and it changed the whole facit of Amateur Radio in that area and returned it to the 1950's.

Two metre FM repeaters are really akin to a telephone system or an up-market CB system. We buy sophisticated transceivers and attach them to antennas that only have to make the local repeater. What would happen if we didn't have a 2 metre FM repeater locally?

What happened in the U.K. was a sudden surge in antenna design and everything

went "horizontal" again. The band suddenly opened up on all frequencies and Amateurs talked about Radio and antenna designs, not weather. Gee, it sounds exciting. Turn off RPM for a year!!!

(I bet thats lowered my popularity even further..!!)
VK2AYD.

ORARC Members Assist Riders

Over the weekend of 8th/9th August, members of the club provided communications facilities for a series of equestrian endurance rides at Koorainghat.

The Saturday activities involved setting up the base station facilities, and Sunday was devoted to covering the radio checkpoints and base station operating.

The weather was well short of being pleasant, but endurance riders seem to have no qualms about riding in wind and rain, and over soggy, slippery, trails and sometimes wave-swept beaches.

Richard (VK2CHC) co-ordinated the communications coverage, and was supported by Bob (VK2XIQ), Neil (VK2EI), Roy (VK2YOR), Charles (VK2FSH) and Trevor (VK2TT) in manning the operational points.

The organisers have indicated that there will be a cash donation forthcoming to help augment the club's finances.

Contests and Age

In June, I took part very briefly in the All Asia Contest (CW of course). In this contest you have to give your age as part

of the report. This produced some interesting statistics.

I only operated for a period of 6 hours. Worked 255 stations, all on 21 mHz. Mostly Japanese and Russian. This is how it showed by age:-

Under 20	< 1%
20 to 30	4.3%
30 to 40	21.3%
40 to 50	33.6%
50 to 60	19%
60 to 70	17.4%
70 plus	3.2%

The average age was 48.

I wonder what this tells us??

de VK2AYD

[The Under-20's and Over-70's are the smartest; they don't waste time on contests? - Ed.]



- If the period of a waveform is
 milliseconds, what is the frequency?
- (a) 2 Hz (b) 200 Hz (c) 500 Hz (d) 500 Hz
- 2. What is the approx. length of a half wave dipole antenna for 7 mHz.?

 (a) 7.0m (b) 10.2m (c)20.4m (d) 40.8m
- 3. What should the highest actual value of a 220 ohm 5% tolerance resistor be?
 (a) 225 (b) 231 (c) 11 (d) 209
- 4. What explorer took Amateur Radio on his quest to the North Pole?
 - (a) Amundsen (b) Livingstone (c) Perry (d) Scott
- 5. Who was the first ham to transmit from space?
- (a) Garriott (b) Garroway (c) Knenkel (d) Huntoon

6. What group developed the first popular TNC kit TNC-1?

(a) AMSAT (b) QEX (c) HAPN (d) TAPR

- 7. What Sun-spot cycle are we now in?
 (a) 11 (b) 18 (c) 23 (d) 32
- 8. When does the sun rise due east and set due west of Port Macquarie?

(a) Never (b) June (c) September (d) December (Answers next issue)



Decibels

What are they? No they are not December Christmas Bells!

The prefix deci means 10 and Bel was named after Alexander Graham Bell.

It was originally used to measure sound (which is normally measured in phon's).

10 dB = 1 Bel which is 10 times as much energy as 0 dB. 0 db = 1

The term dB on its own means nothing. It must relate to something. dB could refer to anything, knowing its mathematical function is more important. The mathematical relationship is as follows:

- +30 One thousand times
- +20 One hundred times
- +10 Ten times
- +3 Two times
- +1 One and a quarter times
- 0 No change
- -1 Four fifths
- -3 One half
- -10 One tenth
- -20 One hundredth
- -30 One thousandth.

So increasing 10W by 3dB gives 20 Watts. Equally decreasing by 3dB will halve your

power to 5W.

The Decibel notation establishes a relationship between two values - in other words it is a ratio.

If a linear amp spec said it has a gain of 20 dB then it means the output is 100 times its input. This is referred to as 20 dBW.

To summarise, for dB to possess a real value, it must relate to a known quantity (eg dBW)

The reason for using Decibel notation is that it establishes a relationship between two values - in other words, it is a ratio.

So a 100 watt transmitter output can be described as 20dBW.

If it was 23dBW it would double to 200 watts and 26dBW would make it 400 watts.

When it comes to antennas be careful. Some makers specify dBi, some dBd. dBi relates to gain over a theoretical isotropic antenna which is one that radiates in al directions. dBd relates to gain over a dipole which doesn't radiate in all directions.

Since a dipole has a 2.1dB gain better than a isotropic antenna, you could get confused.

For example - a beam antenna with a gain of 3dBi is in fact only 0.9dB better than a dipole. If its gain was 3dBd then it would have twice the gain of a dipole.

-VK2AUD

(Thanks to RSGB June Radcom and Jeff Black (G0UKA) article.)

Nostalgia

Many years ago, VK2ATM held a committee meeting at his home, and his XYL (Wendy) made some delicious Beer Scones. These scones are just the normal scone recipe, using beer instead of water or milk.

Laurie (VK2ELN) was cruising by in the course of his NRMA duties, heard about the Hot Scones with Jam and Cream, and call in for supper.

After enjoying the last 4 scones, Arthur's XYL mentioned to Laurie that she also used beer as a hair rinse.

Laurie remarked "I would love to wash my hair in beer but the trouble is I cannot get the beer up past my mouth".

- Undercover Reporter

Packet Digipeater Silent
The VK2RPM ROSE Switch and
VK2RPM-1 digipeater are both silent, but
hopefully it will only be a temporary period
off air.

Following a period of intermittent failures of the ROSE Switch which culminated in a complete failure, it was taken out of service for investigation and upgrading and temporarily replaced with a simple Digipeater. Fate was against us, and in the recent high winds, the antenna system suffered apparent damage. For this reason, the Digipeater was taken out of service on Wednesday 12th August, pending replacement of the antenna.

Some repair and maintenance to the repeater site cabinet is planned for the immediate future. Rust repair and prevention has become an urgent need and preliminary steps have been taken to acquire the necessary materials to complete this work.

Members willing and available to participate in working bees to carry out general maintenance, painting, scraping, and the like, at the repeater site on Middle Brother, would be welcomed. Contact VK2VY, VK2DAL, or VK2TT to "join in", and share the load... and the fun in the sun!

JOTA's Coming.

(And so is the Billy-cart Derby)

Jota is almost upon us. It will be over and done with by the time the next issue of OXTALES hits the streets.

There appears to be growing interest amongst the Scouting and Guiding movements to have more groups participating, and requests for our club's help have already been received for an additional station. We need more volunteers and equipment to meet the demand. Please examine your social calendar to see if you are free to help this worthwhile activity over at least part of the weekend 17/18th October.

The club's image within the community can only be enhanced by our regular appearance at events such as Jota and the charity event at Beechwood, The Billy Cart Derby (scheduled for Sunday 11th October). Please do your best to help in these functions.

Membership Subscriptions

The Treasurer is waiting with receipt book at the ready for Membership renewals for the 1998/1999 year. See the list on Page 8, and the note regarding OXTALES distribution. Are you one of the missing names from the list?



OXLEY REGION AMATEUR RADIO CLUB Inc. MEMBERSHIP REGISTER.

(As at 18 August, 1998)

Cat.	FIRST NAME (Spouse)	SURNAME	CALL SIGN	TOWN/CITY	TPH. NO.
F	OHN (FLORENCE)	BAILEY	VK2KHB	PORT MACQUARIE	02 6582.219
	OHN	BAYLIS	VK2IB	PORT MACQUARIE	
	ROYW	BURGESS	VK2YOR	PORT MACQUARIE	02 6583.934
	PETER (COLLEEN)	BURLS	1121011	PORT MACQUARIE	02 6583.516
	BRUCE	CLARK	VK2MAZ	PORT MACQUARIE	02 6583.524
	KEVIN (JUNE)	COULTER	VK2MAM	PORT MACQUARIE	02 6583.832
	RICHARD (LINDA)	COURT	VK2CHC	WAUCHOPE	02 6585.237
FIA	THE RESIDENCE OF THE PROPERTY	DALRYMPLE	VK2XU	PORT MACQUARIE	02 6584.992
FI		DANIELS	VIIZAO	PORT MACQUARIE	02 6583.193
	CHARLES (PAT)	EDMONDSON	VK2FSH	PORT MACQUARIE	02 6584.049
	STAN	ELLIS	VK2DDL	TUNCURRY	OZ 0304.043
		GLEESON	VKZMOQ	PORT MACQUARIE	02 6582.201
	BADEN (VALERY)	GREENWOOD	VK2ZIS	PORT MACQUARIE	02 6583.468
4 L I	GRAEME	HANLON	ANZZIJ	PORT MACQUARIE	02 0303.400
		HARWOOD	VK2BAZ	GUNNEDAH	
5 D I			VK2BZA	LAKE CATHIE	02 6585.544
6 L I		HILL			02 6583.709
7 F S		HODDER	VK2DV	PORT MACQUARIE PORT MACQUARIE	02 6582,508
	DON	JONES	LACOU	The second secon	
	IOHN (THEA)	IONES	VK2IJ	LAKE CATHIE	02 6585.452
0 D I		KELLY	VK2WBK	TAMWORTH	02 6776.20
1 F J		LEEDS	VK2KN	PORT MACQUARIE	02 6582.599
2 L I		LINDSAY	VK2CLL	WAUCHOPE	02 6587.11!
3 L I		LUNDELL	VK2ZHE	PORT MACQUARIE	02 65 -
	KEITH (GWEN)	LUTTON	VK2KDL	TELEGRAPH POINT	02 6585.032
	ALLAN (DAWN)	MADIGAN	VK2MAI	WAUCHOPE	02 6585.20
6 F J	IASON	MARIS	VK2FT	TELEGRAPH POINT	02 6585.047
7 F J	IOHN (KARIN)	MCDONAGH	VK2VY	PORT MACQUARIE	02 6582.00
8 F I	DOUG	MCDONALD	VK2EUM	PORT MACQUARIE	02 6583.61
9 F I	IIM	MCINTYRE	VK2CIM	PORT MACQUARIE	02 6583,569
0 L /	ARTHUR ((WENDY)	MONCK	VK2ATM	PORT MACQUARIE	02 6583.13
1 F /	ALLAN	NUTT	VK2GD	PORT MACQUARIE	02 6582.35
2 F I	DAVID A (DEE)	PILLEY	VK2AYD	KING CREEK	02 6585.26
	NEIL (VERENA)	SANDFORD	VK2EI	PORT MACQUARIE	02 7584.91
	BILL (RUTH)	SINCLAIR	VK2ZCV	PORT MACQUARIE	02 6583.93
	DAVID (ROMA)	SMITH	VK2DAL.	WAUCHOPE	02 6585.10
6 D I		ST. JOHN	VK2MZ	FORSTER	
	DAVID (ALEEN)	TARRANT	VK2HBC	WAUCHOPE	02 6585.63
	TREVOR (PHYLLIS)	THATCHER	VK2TT	WAUCHOPE	02 6585.22
	GRAEME	VIRTUE	VK2GJ	BRUNSWICK HEADS	in a Branchin
	BRUCE (GWEN)	WALKER	VK2HOT	PORT MACQUARIE	02 6583.83
11 F J		WEBSTER	VK2BZD	PORT MACQUARIE	02 6582.403
	RONALD W	WYLES		PORT MACQUARIE	02 6581.108
1 1	ITOTALD II	F = Full Member	D = Distant N		

OXTALES DISTRIBUTION

Future issues of OXTALES will be distributed ONLY to financial members. Members whose names do not appear above, should arrange for their membership subscriptions to be paid as soon as possible to restore their financial status, thus ensuring continuity of receipt of this erudite publication.