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

Club e-mail address: vk2bor@orarc.org Club Website: www.orarc.org

September 2009

Compiled by VK2TT & VK2AYQ

PRESIDENT: Henry Lundell VK2ZHE 6582.0534 VICE PRES: Jim Neil VK2VIV 6581.2481 TREASURER: John Bayley VK2KHB 6582.2192 SECRETARY: Jim Neil (A/g) VK2VIV 6581.2481

President's Report

It is an honour to write my first report as your newly-elected president.

Thank you to the outgoing committee for taking good care of the club's affairs for the last three years. In that time the club has seen many changes and enjoyed some



good fortune. The most visible of these are that our meeting place is the brand new SES building, and that we have our communications caravan. Such things are not easily won. It takes astuteness and initiative together with leadership to make this sort of progress in long term plans. Just take a moment or two to recollect the uncertainty created a few years ago when it became knowledge that our original meeting place, the old SES building, was to be closed. Similarly, think about how ambitious it was to set out to build a communications trailer by volunteer labour on a miniscule budget. It's quite a story of many working bees between buying a trailer and ending up with the freshly painted fitted out refurbished caravan that made the recent Lighthouse Weekend and RD Contest so enjoyable!

On the subject of working bees, I must publicly thank that small group of hard working members who always appear when there is work to done. Thank you.

Congratulations to the incoming committee. It was gratifying that written

nominations were received for most of the positions. The only concern is that no nominations were received for of Secretary. Despite position impassioned plea at the AGM Officer David Pillev Returning VK2AYD, nominations no received from the floor. David reminded members that the club cannot function without a Secretary. We are all indebted to outgoing Secretary and newly elected Vice-President Jim Neil VK2VIV for agreeing to continue as Secretary until a new Secretary can be found. As Oxtales goes to press we still don't have a volunteer so I must ask you all to consider this dilemma. Please let me know if you are able to take on the duties of Secretary. Your club needs your services!

At the club's Annual General Meeting in August, Bruce Walker VK2HOT handed out 20 survey forms to members. Thank you to Bruce for undertaking the survey, and thank you to the 10 members who returned their completed surveys. The results, as with any survey, make interesting reading. For example, from the statistics

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Down The Coax

All scheduled meetings in the S.E.S. Building Central Road Port Macquarie

Friday Night Get-Together Friday 25th Sep. 2009 7.00pm

October Monthly Meeting Saturday 3rd Oct. 2009 2.00pm

JOTA

ORARC participation Saturday 17th October 2009

Beechwood Billy Cart Classic Sunday 25th October 2009

Friday Night Get-Together Friday 23rd Oct 2009 7.00pm

November Monthly Meeting Saturday 7th Nov 2009 2.00pm

E-mail directory

Reflects ALL changes notified up to Xxth August 2009

VK2AG (Lewis) lewisgreen@bigpond.com

VK2EI (Neil) neilsan@tpg.com.au

VK2EM (Bruce) vk2em@tpg.com.au

VK2GD (Alan) anu16734@bigpond.net.au

VK2KC (John) vk2kc@bigpond.com

VK2TT (Trevor) grumps@midcoast.com.au

VK2ATM (Arthur) arfamo@midcoast.com.au

VK2AYD (David) dvdplly@midcoast.com.au

VK2AYQ (John) hansenjo@ozemail.com.au

VK2BEL (Allan) belly@skymesh.com.au

VK2BOR (ORARC) vk2bor@orarc.org

VK2CJM (Chris) Chris@CalmDowns.org.au

VK2CHC (Richard) yachtsman@midcoast.com.au

VK2CLL (Larry) vk2cll@clearmail.com.au

VK2DDL (Stan) svellis@tsn.cc

VK2KK (Steve) haddie 007@hotmail.com

VK2EJK (Bob) rbr01962@bigpond.net.au

VK2GPG (Paul) pauliejane@bigpond.com

VK2HOT (Bruce) vk2hot@tsn.cc

VK2IEV (Joe) rbivona@bigpond.com

VK2KCE (Charles) cpedmond@midcoast.com.au

VK2TMG (Brett) breree@gmail.com

VK2UPR (Paul) vk4upr@dodo.com.au

VK2VIV (Jim) jim.neil@gmail.com

VK2YOR (Roy) rjburges@bigpond.com

VK2ZCM (Craig) vk2zcm@dodo.com.au

VK2ZCV (Bill) wsi54224@bigpond.net.au VK2ZCW (Bill) cabrooke@westnet.com.au

VK2ZHE (Henry) lundell@tpg.com.au

VK2ZTM (Tim) c/- info@tvg.com.au

Net Controllers' Roster Nets on Voice Repeater VK2RPM 146.700 MHz

11Cts OII V	orce repeate	1 112111111	10.700 11112				
Sundays		W	Wednesdays				
(0830 Lo	cal) Septen	nber 2009 (1	1930 Local)				
VK2VIV	Sep - 06	VK2AYD	Sep - 02				
VK2TT	Sep - 13	VK2ZCM	Sep - 09				
VK20A	Sep - 20	VK2ATM	Sep - 16				
VK2VIV	Sep - 27	VK2ZHE	Sep - 23				
		VK2EI	Sep - 30				
October 2009							
VK2TT	Oct - 04	VK2AYD	Oct - 07				
VK20A	Oct - 11	VK2ZCM	Oct - 14				
VK2VIV	Oct - 18	VK2ATM	Oct - 21				
VK2TT	Oct - 25	VK2ZHE	Oct - 28				
November 2009							
VK2OA	Nov - 01	VK2EI	Nov - 04				
VK2VIV	Nov - 08	VK2AYD	Nov - 11				
VK2TT	Nov - 15	VK2ZCM	Nov - 18				
VK2OA	Nov - 22	VK2ATM	Nov - 25				
VK2VIV	Nov - 29						

E-mail directory (Continued)

VK2ZYZ (Charley) rameses32@yahoo.com VK2FABJ (Ailsa) cabrooke@westnet.com.au VK2FBRG (Barry) bgilson11@hotmail.com VK2FHKO (Horst) horstko@bigpond.com VK2FJKD (Jim) jaidanl@bigpond.com VK9FLHI (Des) lhibluelag@bigpond.com VK2FRTH (Bob) miastar@aussieisp.net.au

Membership Subscriptions Increase

In accordance with Paras 3.12.3 & 4 of the Constitution, the committee has reviewed our current annual Membership Subscriptions and resolved that an increase of \$5 per annum be applied to the Full membership fee & submitted for ratification at the August 2009 AGM. The increase was ratified and minuted at that meeting.

Annual Subscriptions are now \$30 P/A for Full Membership & \$10 P/A for distant members.

Carnaryon Memories

(By Bill Brooke—VK2ZCW)

I was first interviewed in Perth at AWA in 1962 but apart from being told it was to work on a contract for NASA at a tracking station, I had no idea where or when I was likely to be employed. After waiting for nearly 9 months, around June 1963 I received a letter from AWA offering a position at Carnarvon which after some discussion with my wife Ailsa, I accepted. I joined AWA in Perth and went to Sydney for training. There I met the other members of the staff who were to work on the Goddard Range and Range Rate (GRARR) system in Carnarvon. These were, Ron Cuthbert, Engineer in charge, Geoff Ruck, Senior Technician, Kel Nickerson, Receiver Tech., and myself as Transmitter Tech. Also there was Don Lindsay, Senior Engineer, who came to Carnarvon as AWA 2 I/C and took great ın our system. After completion of the training period we returned to Perth and went to Carnarvon

Our first few days in Carnarvon were spent in the Port Hotel waiting for our furniture to arrive so we could move into our home in Mills Ave. The station was a brand new, totally empty Telemetry and Command building, a power house, FPQ 6 Radar building and prepared sites for the GRARR and RF Command systems which would be in Vans. We were very impressed by the T and C building, especially the floor, which was square aluminium tiles covered with lino-tiles and mounted on jacks about 2 ft above the concrete slab. We were told that the builder had spent weeks getting the floor perfectly level. Our first job was to rip the floor up because the concrete had not been sealed and had to be painted. I doubt if the floor was ever level again after that!!!!

Eventually the GRARR equipment vans and the trucks with the Antennas and Collimation Tower and all the other parts from Motorola arrived and the installation began. The Motorola Team was led by Paul Travis but I don't remember the names of the others apart from John Koch who became a good friend. I spent a lot of time working with Paul who had to rematch some sections of the S-Band waveguide which had been slightly damaged in transit. This was interesting as I had never seen anything like this done before and gave me the chance to use much advanced test equipment for the first time. We had 2

transmitters at the GRARR site. The VHF Transmitter was capable of 10 Kw or 1 Kw operation selected by swapping over coaxial patches. The coax was about 4 inch diameter hard line, so doing a change was a business. The transmitter was a 5 cavity Klystron driven a Transistor/Varactor multiplier module and gave an output power of 10 KW with an input of 100 mW from the driver module. Paul told us that we should hope that we never had a problem with the driver modules as they were extremely difficult to align to obtain the specified output and I sure found this out later when

failures occurred.

The GRARR heard its first satellite Feb/March 1964 around when commenced tracking the VHF Interplanetary Monitoring Platform, IMP-1 satellite. This was in an elliptical orbit going well out towards the moon and mapped the earths ionosphere proving that it was distorted by the effect of solar wind pressure. Tracking IMP-1 gave us some unexpected problems. We transmitted a control tone of 4 kHz to switch on a subcarrier in the satellite which then retransmitted our ranging tones back to us for recording. Unfortunately the subcarrier was at quite a low level and could only be heard on a head-phone set when the satellite was close. It was found that by using the NASA orbital predictions we could work out what the Doppler Counter should read at the time we were going to record data. By opening the sub-carrier loop and presetting the counter we then had no difficulty in acquiring the subcarrier signal. Over the 3 years I was at Carnaryon Range and Range Rate we tracked several different IMP satellites as well as OGO (orbiting geophysical observatory), (elliptical orbit EGO geophysical observatory). (Geodetic Earth Orbiting Satellite) which was doing studies of different types of satellite stabilization while in orbit such as gravity gradient stabilization and the structure of the earths gravitational field. These Satellites were tracked with either the VHF or S-Band systems depending on the type of transponders carried and the data rates generated by the Ranging and Experimental equipment carried.

It soon became clear that with only 4 people working at the GRARR site we couldn't handle the load of tracking and maintenance required so the staffing increased with a number of local girls being hired and shifts being organized. Extra technicians were also hired later so

that leave breaks and sickness would be covered and the site facilities were upgraded to cater for the increased staff

and male and female personnel.

During the manned Gemini missions I was co-opted to work on the RF Command site which was a very interesting change. The Command VHFtransmitters were multi-cavity Klystrons feeding into Helical antennas which were following the site slave bus to ensure correct pointing. The engineer in charge was Sid Hills who had come out from UK to take the position. I continued going to RF Command for the whole time I was in Carnarvon.

During my time there I was involved with the Water Skiing Club, Badminton Club, (president for a period), played soccer with a team of mostly Italian men, basketball with the Trackers club, sang with a folk group at the Gemini Lounge and at Carols by candle-light.

Altogether it was a very exciting and interesting 3 years of our life during which Ailsa and I made many friends and mostly hugely. ourselves We Carnaryon to proceed to Toowoomba where I held a position at the Cooby Creek Tracking Station for the next three years.

A Universe for All

For all ordinary purposes of science, the earth can be regarded as a stationary system, but to the astrophysicist, the earth, far from being at rest, is whirling a giddy and highly space in

complicated fashion.

The earth has a daily rotation around its axis at 1000 M.P.H and its annual revolution around the sun at the rate of 20 M.P.sec. The earth is also involved in a number of other less familiar gyrations. Contrary to popular belief the moon does not revolve around the earth – they revolve around each other, or, more precisely, around a common centre of gravity. The entire solar system then is moving within the local star system at the rate of 13 M.P. sec. The local star system is moving within the Milky Way at the rate of 200 M.P.sec., and the Milky Way is drifting with respect to the remote external galaxies at the rate of 100 M.P.sec., all in different directions.

SOME MORE FACTS OF OUR **EXISTENCE**

- Velocity of light is unaffected by 1 the motions of the earth.
- Radio waves travel at the same speed as light waves.
- 3 Wavelength of light:

• Red .00007 cms

• Violet .00004cms

Light continuous but 1s not

bundles of photons.

- 5 Rowing a boat upstream, then downstream, takes longer than rowing the same distance in still
- The velocity of light is the top 6 limiting velocity in the universe.
- 7 Energy has mass and mass has energy; the value of mass in any unit of energy M=E/C²!!!

A yard stick travelling at 90% of 8 light will shrink to ½ its length.

9 If it could attain the speed of light, it would shrink away to nothing.

10 There are billions of galaxies containing hundreds of millions of flaming stars, rarefied gas and cosmic dust.

— Lewis Green (VK2AG)

International LH/LS Weekend & Remembrance Day Contests 15 & 16 August 2009.

(By Henry, ∇ K2ZHE) It was pleasing to see a good cross section of members participating in the activities over the two days. The scores achieved reflected well on the effort that was made. The glorious

weather was a real bonus.

VK2BOR operated portable during the daylight hours on Saturday 15 August 2009 from the club's communications caravan at the Tacking Point Lighthouse AU 0034, Port Macquarie, NSW. VK2BOR made 41

contacts from the Lighthouse

VK2BOR operated portable during the 24 hours of the RD contest on Saturday evening and all day Sunday 15 and 16 August 2009 from the club's communications caravan at the QTH of VK2ZHE at Port Macquarie, NSW. VK2BOR made 125 contacts for a total of 123 points.

Those who participated and those who visited the sites to lend support and

capture images, were: Barry Gilson VK2FBRG John Bailey VK2KHB

Bruce Walker VK2HOT
Arthur Monck VK2ATM
Jim Neil VK2VIV
Neil Sandford VK2EI
John Hansen VK2AYQ
John McLean VK2KCE
Des Thompson VK9FLHI
Bill Brooke VK2ZCW
Bill Sinclair VK2ZCV
Alan Nutt VK2GD
Larry Lindsay VK2CLL
David Pilley VK2AYD
Lewis Green VK2AG
Joe Bivona VK2IEV
Roy Burges VK2YOR
Trevor Thatcher VK2TT
Steven Brown VK2FSBB
Henry Lundell VK2ZHE

Henry (VK2ZHE) in the galley of the club's caravan, preparing nourishment for the workers.

Club Calendar

On two occasions in recent years, we have arranged to produce an A3 sized full-colour calendar, featuring portraits of all club members. These calendars proved quite popular, and their sales adequately covered the cost of their production. It is mooted that we again produce another such calendar for the coming year, 2010.

The portraits used in our first two productions, had captured our individual images as we appeared quite a few years back. It is thought that some, or all of us, would perhaps like to have those images updated to reflect the valued maturity that has accrued over the intervening years.

Accordingly, arrangements are in hand to capture fresh "as we are now" images for any members wishing to be "updated" in the

2010 calendar. John (VK2AYQ) and I will be armed with cameras at all forthcoming monthly meetings to achieve this end.

Distant members, or members who are unable to make it to immediate future meetings are invited to do a DIY shot of their own image, and forward via either e-mail or snail-mail to Trevor (VK2TT) as soon as practicable. Members who prefer to be shown as depicted with their "historic" image, need not do anything, and the old image will be used.

— Trevor (VK2TT)



L to R:

Barry (VK2FBRG)

John (VK2CE)

Alan (VK2GD

Bill (VK2ZCV)

At Tacking
Point
Lighthouse
ready to take
part in the
contest.

Right: Bill (VK2ZCV) at one of the operating desks of the caravan on the LH/LS event.



Left: The club's caravan on site at Tacking Point Lighthouse

Right: Bill (VK2ZCW) at the HF operating desk.





An unusual spectator drifted in to take stock of our installation at **Tacking Point. Arthur (VK2ATM)** had his camera at the ready and captured the moment.

ORARC's 2009 AGM

ORARC's 2009 AGM, held on Sat August 1st at the SES HQ, attracted a pleasing roll-up of 23 members. As earlier foreshadowed, Alan Nutt, VK2GD relinquished the Presidential Office after having served some seven terms over the past decade. Thank you Alan for those years of dedication to the club. Remember, the seat will always be warm should you choose to occupy it later down the track!

Welcome to our new President, Henry (VK2ZHE) and the membership extends their thanks for your acceptance of the Presidential Office to replace Alan. We look

forward to a further period of continuing club progress under your presidency.

To John Bailey (VK2KHB) we extend a hearty welcome back to the position of Treasurer. In these troubled times of financial turbulence, all beyond our boundaries of control, the Treasurer's role is not a "push-over" but we know it is in good hands.

Congratulations and thanks to all those other familiar names who have changed

positions to fill the other mandatory posts. We look forward to soon filling the currently vacant roles of Secretary and VK2BOR Station manager.

Here is the line-up of Office bearers that emerged from the AGM:

Vice President Jim Neil VK2	VIV
Secretary Jim Neil (Acting until Office filled) VK2	VIV
Treasurer John Bailey VK21	KHB
Committee Member 1 Alan Nutt VK20	GD
Committee Member 2 John McLean VK21	KC
Committee Member 3 Bill Brooke VK22	ZCW
Public Officer Roy Burges VK2	YOR
Auditor Victor Hume	
Repeater Chairman Bill Brooke VK22	ZCW
Oxtales Editors Trevor Thatcher VK27	
John Hansen VK2	AYQ
VK2BOR Station Manager Vacant (Awaiting filling)	
Welfare Officer Bill Sinclair VK22	
Publicity Officer John McLean VK21	
Education Officer Larry Lindsay VK20	
	FHKO
Club Historian John Bailey VK21	
	FBRG
WIA Liaison Delegate David Pilley VK2	AYD
SES Liaison Jim Neil VK2	VIV

President's Report (Continued from page 1)

collected, it is very pleasing to see that 9 out of the 10 respondents are members of the Wireless Institute of Australia. More importantly though, the real value lies in the various comments and suggestions offered.

We commence the club financial year with our first monthly General Meeting in September addressing two of suggestions that members made in the survey. Firstly, the monthly business meeting had a short agenda to keep the length of the meeting to a minimum, but still keeping members informed of club affairs. Secondly, the re-introduction of interesting lectures and demonstrations has set a very high standard with the presentation of a most interesting and

informative introduction to digital communications for Amateur Radio by Arthur Monck VK2ATM.

The Committee is trying to arrange lectures and demonstrations for all our monthly general meetings. You can help by letting the Committee know what topics you would like to see covered. A phone call or an E-mail is all it takes. We will do our best to oblige. I know many of you have interests and experiences that you would like to share with your fellow members. Now is the time to offer to step forward.

Henry Lundell VK2ZHE President





OXLEY REGION AMATEUR RADIO CLUB Inc. MEMBERSHIP REGISTER.

(As at 1st September 2009)

6		S	Circan	Cuana Nama	Call	Location	Tuk
/ "	at.	Surname	Given	Spouse Name	Call	Location	Tph
1	0	BAILEY	JOHN	(FLORENCE)	VK2KHB	PORT MACQUARIE	02 6582.2192
	D	BELL	ALAN		VK2BEL	COOLONGOLOOK	02 6554.1689
3	0	BIVONA	JOE	(ROSE)	VK2IEV	PORT MACQUARIE	(Mob) 0405040953
	L	BLYTH	BOB		VK2XIQ	TELEGRAPH POINT	•
5	0	BRODIE	BOB		VK2EJK	PORT MACQUARIE	02 6582.0592
6	0	BROOKE	AILSA	(BILL)	VK2FABJ	PORT MACQUARIE	02 6581.0547
7	0	BROOKE	BILL	(AILSA)	VK2ZCW	PORT MACQUARIE	02 6581.0547
8	0	BURGES	ROY	(JUNE)	VK2YOR	PORT MACQUARIE	02 6583.9349
9	0	COURT	RICHARD	(LINDA)	VK2CHC		
10	0	DANIEL	JIM		VK2FJKD	PORT MACQUARIE	02 6583 1933
11	0	EDMONDSON	CHARLES	(PAT)	VK2KCE	PORT MACQUARIE	02 6584.0495
12	D	ELLIS	STAN	(BETTY)	VK2DDL	TUNCURRY	02 6554.7996
13	0	GILSON	BARRY	(FAY)	VK2FBRG	PORT MACQUARIE	02 6583.8814
	0	GREEN	LEWIS	(PAMELA)	VK2AG	PORT MACQUARIE	02 6584.9162
15	0	HADFIELD	STEVE	,	VK2KK	PAPPINBARRA	02 6587.6160
16 1	L	HANLON	KEITH		-	PORT MACQUARIE	
	0	HANSEN	JOHN		VK2AYQ	PORT MACQUARIE	02 6582.7932
18	0	HARDING	DAVID	(ISABELLA)	VK2AIF	WAUCHOPE	02 6586.4980
	0	KOPPEL	HORST		VK2FHK0	LAKE CATHIE	02 6585.5992
	Ĺ	LINDSAY	LARRY		VK2CLL	WAUCHOPE	02 6587.1155
21	L	LUNDELL	HENRY		VK2ZHE	PORT MACQUARIE	02 6582.0534
	0	MADIGAN	ALLAN	(DAWN)	VK20A	WAUCHOPE	02 6585.2043
23		MARTIN	CRAIG	(JENNY)	VK2ZCM	SANCROX	02 6585.3452
24		MCLEAN	JOHN	(CORRINE)	VK2KC	PORT MACQUARIE	02 6584.6220
25		MILLS	TIM	,	VK2ZTM	BEECROFT	02 9868.1434
	H	MINAHAN	CHRIS		VK2EJ	HALLIDAYS POINT	02 6559.3516
27]		MONCK	ARTHUR	(WENDY)	VK2ATM	PORT MACQUARIE	02 6581.0960
	0	NEIL	JIM	(CAROL)	VK2VIV	PORT MACQUARIE	02 6581.2481
	0	NUTT	ALAN	(ELAINE)	VK2GD	PORT MACQUARIE	02 6584 9639
30		PILLEY	DAVID	(DEE)	VK2AYD	KING CREEK	02 6585.2647
31		ROTH	BILL	(,	VK2CWR	PORT MACQUARIE	02 6581.1776
32		SANDFORD	NEIL	(VERENA)	VK2EI	PORT MACQUARIE	02 6582.5830
33		SINCLAIR	BILL	(1-1-1-1-)	VK2ZCV	PORT MACQUARIE	02 6583,9302
34		TARRANT	DAVID	(AILEEN)	VK2TBC	ILUKA	,
35		THATCHER	TREVOR	\ <i>\</i>	VK2TT	WAUCHOPE	02 6585.2278
36 1		THOMPSON	DES	(BETTY)	VK9FLHI	LORD HOWE ISLAND	02 6563 2152
37		WALKER	BRUCE	(GWEN)	VK2HOT	PORT MACQUARIE	02 6583.8360
38		WEBSTER	PAUL	(CAROL)	VK2BZC	PORT MACQUARIE	02 6582.3377
	•			A = ASSOCI			

Category Key: $O = ORDINARY \quad A = ASSOCIATE \quad D = DISTANT \quad H = HONORARY \quad L = LIFE$

(If your name is not included on the above list, you may be unfinancial, or your membership subscription was not received by the treasurer in time to be included in this issue of OXTALES.

Membership subscriptions for the year 2009-10 fell due on the 1st July, 2009

If you have not renewed your membership and you wish to do so, please forward same to the treasurer as soon as possible.)