

# March 2011 Compiled by VK2TT & VK2AYQ

PRESIDENT:	Henry Lundell	VK2ZHE	6582 0534
VICE PRES:	Bruce Walker	VK2HOT	6583 8360
TREASURER:	John Bailey	VK2KHB	6852 2192
SECRETARY:	John McLean	VK2KC	6584 6220

# President's Report

I trust everyone who went to the Central Coast Amateur Radio Club Field Day at Wyong on the  $2\tilde{7}^{th}$  of February 2011 had a safe and enjoyable journey. It was very -



pleasing to see so many of our club members at Wyong again this year. The ORARC tee shirts certainly stood out in the crowd! There were many bargains to be had and I spotted many of our members joyously carrying their booty to their cars.

As well as bargain hunting, Wyong is a great opportunity to meet up with fellow amateurs, especially those who live a long way from Port Macquarie. Several amateurs that I spoke with mentioned that they were very pleased that our publicity for the 2011 ORARC Field Day has been stressing the importance of booking accommodation early for the June Long Weekend. Thank you to Tim Mills VK2ZTM for covering this in the VK2 notes each month in Ama-

teur Radio magazine. Due to the WinterSun Festival 2011 being held in Port Macquarie on the same weekend accommodation is starting to become scarce. If you have friends who are intending to come to our Field Day please remind them to book their accommodation as quickly as possible, or better still, offer them a bed for the weekend.

I must also thank everyone who went to the Coffs Harbour Radio Expo on the 30<sup>th</sup> of January. Our club was well represented.

Thank you to those who took the time to assist with the ORARC stand.

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#### Down The Coax Friday Night Get-Together Friday 18 March 7.00 pm

### Saturday 19 March John Moyle Field Day

Sunday 20 March Car Rally

Monthly Meeting Saturday 2 April 2:00 PM

Friday Night Get-Together Friday 15 April 7.00 pm

Sunday 17 April WIA National Field Day

Saturday & Sunday 23 & 24 April Urunga Convention

> Monthly Meeting Saturday 7 May 2:00 PM

### E-mail Directory (as at 3rd March 2011)

KEITH ANDERSON kjaprivate@exemail.com.au TONY PERRETT tony.perett1@bigpond.com VK2AG LEWIS lewisgreen@bigpond.com VK2ATM ARTHUR arfamo@midcoast.com.au VK2AYD DAVID dvdplly@midcoast.com.au VK2AYQ JOHN hansenjo@ozemail.com.au VK2BEL ALAN belly@skymesh.com.au VK2CHC RICHARD yachtsman@midcoast.com.au VK2CLL LARRY lindsay@clearmail.com.au VK2DDL STAN svellis@tsn.cc VK2DFN DAVID davidnewey@ymail.com VK2EI NEIL neilsan@tpg.com.au VK2EJ CHRIS Chris@CalmDowns.org.au VK2EJK BOB rbr01962@bigpond.com.au VK2EM BRUCE vk2em@tpg.com.au VK2FABJ AILSA cabrooke@westnet.com.au VK2FBRG BARRY bgilson11@hotmail.com VK2FCVI LYLE vk2fcvi@cv27.net VK2FHKO HORST horstko@bigpond.com VK2FJDH JOSH holmesj91@gmail.com VK2FJKD JIM jaidanl@bigpond.com VK2FMDW MICHAEL wardymd@gmail.com VK2FRF ROBERT robfrost780@hotmail.com VK2HOT BRUCE bw vk2hot@yahoo.com.au VK2HPF PETER fletcher@physics.usyd.edu.au VK2IEV JOE rbivona@bigpond.com VK2KC JOHN vk2kc@bigpond.com VK2KCE CHARLES cpedmond@midcoast.com.au VK2KSM STUART stuartmelville@bigpond,com VK2LPN LEONIE leonienewey@ymail.com VK2TT TREVOR grumps@midcoast.com.au VK2VIV JIM jim.neil@gmail.com

Net Controllers' Roster Nets on Voice Repeater VK2RPM 146.700 MHz

Sundays	Wednesdays
(0830 Local)	(1930 Local)
	Marah 2011

<b>March 2011</b>					
VK2VIV	Mar - 06	VK2ATM	Mar - 02		
VK2TT	Mar - 13	VK2ZHE	Mar - 09		
VK2OA	Mar - 20	VK2EI	Mar - 16		
VK2VIV	Mar - 27	VK2AYD	Mar - 23		
		VK2ZCM	Mar - 30		
April 2011					
VK2TT	Apr - 03	VK2ATM	Apr - 06		
VK2OA	Apr - 10	VK2ZHE	Apr - 13		
VK2VIV	Apr - 17	VK2EI	Apr - 20		
VK2TT	Apr - 24	VK2AYD	Apr - 27		
May 2011					
VK2OA	May - 01	VK2ZCM	May - 04		
VK2VIV	May - 08	VK2ATM	May - 11		
VK2TT	May - 15	VK2ZHE	May - 18		
VK2OA	May - 22	VK2EI	May - 25		
VK2VIV	May - 29				

VK2VTH STEVEN sharkbait\_@hotmail.com VK2VV GRAHAM vk2vv@wia.org.au VK2YOR ROY rjburges@bigpond.com VK2ZCV BILL wsi54224@bigpond.net.au VK2ZCW BILL cabrooke@westnet.com.au VK2ZHE HENRY lundell@tpg.com.au VK2ZIS GRAEME admiral@midcoast.com.au VK2ZTM TIM tim.ztm@gmail.com VK5DK COLIN vk4dk@bigpond.com VK5JL LES lnbjanes@tpg.com.au VK5NC TREVOR vk5nc@bigpond.com VK9FLHI DES lhibluelag@bigpond.com

A new Jaycar store has opened in Port Macquarie and ORARC members will receive a trade discount upon identifying themselves as club members.



Unit 7, 148 Lake Road Port Mecquarie, NSW 2444 portmacquarie@jaycar.com.au www.jaycar.com.au

#### (President's report continued)

That gave me time do a little bargain hunting!

It was an excellent opportunity to talk with many people who regularly attend our annual Field Day.

The year 2011 marks the 40<sup>th</sup> anniversary of the Oxley Region Amateur Radio Club. While the actual birthday is the 2<sup>nd</sup> of October 2011 we will follow the great example set by WIA Centenary last year and take the opportunity to continue celebrating though out the entire year! Of course we will hold a special event on the 2<sup>nd</sup> of October 2011 to mark the actual anniversary of our founding. As I have mentioned in previous reports, the 2<sup>nd</sup> of October 2011 is the Sunday of the Labour Day Long Weekend next year. Monday the 3<sup>rd</sup> is the Public Holiday.

It is hoped that a special event callsign will be issued to commemorate our 40<sup>th</sup> birthday. All being well this callsign will be aired during the ORARC Field Day over the June Long Weekend, and during the October Long Weekend. The intention is to also periodically use it during the interval between the two Long Weekends to give as many people as possible an opportunity to work it, and to give our 40<sup>th</sup> birthday as much publicity as possible! Special event callsigns are always very popular as we all saw last year with the WIA Centenary callsign VK100WIA. This year it will our club's turn with a 40<sup>th</sup> anniversary callsign for the second half of the year, commencing in June.

The Orange and District Amateur Radio Club are celebrating their  $50^{\text{th}}$  anniversary in the first half of this year with their special event callsign VI50AOA which is active until the  $30^{\text{th}}$  of June 2011 so there will be an overlap of a month where there should be two special event callsigns in NSW to work.

Congratulations to the Orange club on their  $50^{\text{th}}$  anniversary.

Congratulations to the St George Amateur Radio Society who are celebrating their 40<sup>th</sup> anniversary on the 4<sup>th</sup> of May 2011.

The ORARC 2011 Field Day is rapidly approaching. It will be held at the Tacking Point Surf Club on the Queen's Birthday Weekend in June. We have the Surf Club building booked for Saturday the 11<sup>th</sup> and Sunday the 12<sup>th</sup> of June so the field day will take place over both days. While it will be our 36<sup>th</sup> annual Field Day, the theme will of course be club's 40<sup>th</sup> anniversary. To run a successful field day requires a lot of planning and assistance from as many members as possible. If you haven't already offered your services, please consider how you can best contribute. If we share the workload everyone will be able to enjoy a great Field Day weekend. I am coordinating the Field Day this year so please contact me by telephone or email. I will soon contact all those who have volunteered so far.

Bill Brooke VK2ZCW has been very busy fine tuning the new EchoLink node for the VK2RPM 146.7 MHz 2 metre repeater. Thank you to Arthur VK2ATM for his kind donation of a new computer for the node. The node number is 553696.

A quick look at "Down the Coax" shows that ORARC members have plenty of upcoming activities to support in addition to our regular meetings.

The John Moyle Field Day runs from 0100 UTC (12 noon local time) on Saturday the19th of March until 0059 UTC

on Sunday the  $20^{th}$  of March 2011. This year the club station VK2BOR will operate in the 6 hour section on Saturday the  $19^{th}$  from the club caravan which will be located at my QTH. Everyone is invited and there will be a free sausage sizzle lunch at noon. (*continued page 4*)

#### (President's report continued)

On Sunday the 20<sup>th</sup> of March 2011 ORARC members will provide safety communications for the Bago Rallysprint car rally at Herons Creek. Bruce Walker VK2HOT is the ORARC co-ordinator for this event. Bruce will be pleased to hear from anyone who wishes to participate but has not yet contacted him.

As mentioned in January Oxtales, the WIA has announced that the 2011 WIA National Field Day will be held on Sunday the 17th of April 2011. ORARC will participate again this year. More details will be announced at the March and April monthly general meetings.

Don't forget the 61<sup>st</sup> annual Urunga Amateur Radio Convention will be held on Easter Saturday and Sunday the 23<sup>rd</sup> and 24<sup>th</sup> of April 2011. The venue as usual will be the Senior Citizen's Hall in Bowra Street, Urunga. Interestingly, ANZAC Day falls on Easter Monday which is the 25<sup>th</sup> of April this year.

Henry Lundell VK2ZHE President

### **Education Report**

Larry Lindsay VK2CLL Foundation Licence Assessments Feb 19 2011.

We had a Foundation Licence training and assessment day at the SES building on Saturday February 19 2011.

Henry VK2ZHE instructed the class on station set up and on-air operation while I handled the theory component.

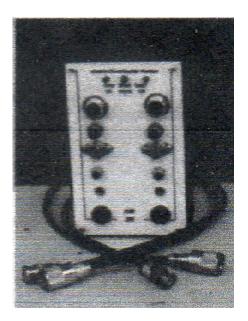
Assessments took place in the afternoon. The two assessors who came up from the Taree Club to assist were Ross Barlin VK2DVZ and Mark Swannack VK2AMS.

The candidates were: Alan Ings from South West Rocks Keith Anderson from Lake Cathie Tony Perrett from Port Macquarie Gerry Van Acker from Laurieton

I am pleased to report that all candidates were successful and four more people can now join the ranks of Amateur Radio. Well done to all those concerned.

Larry Lindsay VK2CLL

Coaxial cable continuity tester by John R L Walker ZL3IB Submitted by John VK2KC

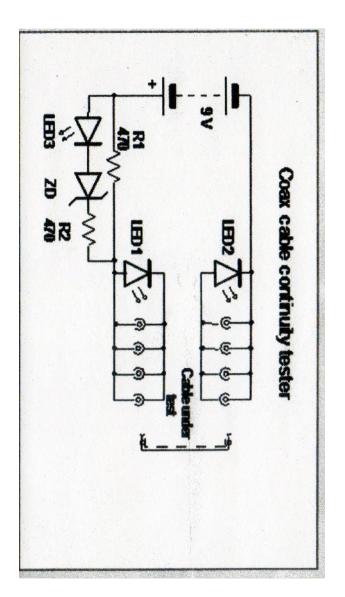


"If you are like me you probably have a number of coaxial or shielded cables terminated with a wide range of plugs in your shack. Testing these for shorts of open circuits is made even easier with the utra simple project. The original circuit was devised by S Roberts and first appeared in Electronic World, March 2996 but I have modified it to also indicate short circuits.

#### How it works:

The green LED1 lights for inner conductor continuity and the green LED2 checks the outer shield. If there is a short circuit neither green LED is illuminated since they are both across the cable and increased current flows through the current limiting resistor R!. Consequently the voltage across R1 increases and when this exceeds a threshold voltage set by the Zener diode ZD the red LED3 lights up to indicate a short circuit. The value of R2 may need 'tweaking' slightly to compensate for variations in the Zener voltage of ZD. Constructional notes:

Builders may include as many different pairs of sockets as the require. In my case I have included SO-239, BNC, Belling-Lee, RCA phone, miniature and standard phone sockets.



Remember, all the sockets must be isolated so it makes construction easier if you use a nonconducting material for the front panel.

Parts list:

green
red
470 ohms 1/4 watt
5V Zener diode

Socket pairs as required.

\*Exact value may need 'tweaking'; see text. (This article was first published in *Break in*)

### Amateur Television history made. Date : 01 / 03 / 2011 Author : Winston Nickols - VK7EM

### (From WIA website)

On Wednesday evening, 23 February 2011, Digital Amateur Television signals from Victoria were received in the northwest of VK7 by Winston VK7EM. After noting the band conditions improving with a lift in the 70cm beacon strength and the appearance of Community TV Channel 31, Winston monitored VK3RTV, the Melbourne Digital ATV Repeater

At around 5.30pm the set top box tuning indicator changed from red to green and shortly after, colour bars appeared. Then with liaison with Peter VK3BFG on 147.4 Mhz simplex, who had made sure the repeater was activated, live pictures were organized, with Peter proudly showing off his equipment with a very professional 'on camera' appearance. Word spread and other stations... Neil VK3BCU. John VK3DO. and Jack VK3WWW joined in. At one stage there were two independent pictures arriving, John 3DQ on one channel, VK3RTV1 and Peter 3BFG on VK3RTV2, both in contact with each

other. John spent much of the time with his back to the camera as he hunted for his other camera or memory card. Peter explained how 10 watts of power on Mount Dandenong was shared between 8 antennas with only two really favouring Tasmania.

Neil switched his uplink video signal between analogue and digital for a comparison. Peter then ran a very professional video showing the history and the building of VK3RTV. This was followed by close-up shots of his equipment, even to the fine print on his FT101E dial. Jack showed a video taken while cycling to the MDRC Hamfest, with a bike mounted camera, and later cycling along Beach Road Sandringham.

As the VK3 WIA broadcast was about to begin at 8.00PM, signals on VK3RTV began to fade. It was only then that a separate receiver monitoring 1250Mhz suddenly came to life with a perfect colour bar signal. A call on 2 metres established that it was Rob, VK3TRX who chatted and then held up a 10 gig. antenna he will use in the forthcoming ATV field day. These pictures on 23 centimetres analogue FM, became quite noise free. The equipment used by Winston consisted of home-brew yagis on each band to a K7MEM design, masthead mounted Minikits preamplifiers, fed into, on 70 centimetres, a Teac SDB451 Digital Set Top Box while for 23 centimetres a Drake ESR 700 satellite receiver.

Credit must go to Peter VK3BFG for his tireless work over almost 40 years in firstly establishing VK3RTV and then bringing it into the digital age and believing it may be possible to receive a picture in Tasmania.



# Morse code usage holds firm

Submitted by Arvadmin on Thu, 03/03/2011 - 14:25 CW VK

Since 2005 the ACMA and other administrations around the world abolished the Morse code testing requirement for amateur licences. The position was that in time code usage would diminish.

However, CW bands are now heavily populated, and feature in major contests and DX expeditions.

The number of people taking up, or returning to CW, as a mode of operation is heartening.

# Amateur Radio Helping out in Christchurch

The massive rescue effort that now involves 300 rescuers boosted by urban experts from Australia has rescued 20 people so far and Christchurch Mayor Bob Parker said a pocket of 15 had been found in the TV3 building, the heart of local television production.

Meantime under normal arrangements, the members of Amateur Radio Emergency Communication (AREC) were busy. Check out the NZART website under "What and Who is AREC". A report on the frequencies in use or activities was yet to be received.

A small team of amateur radio operators are keeping the lines of communication open in earthquake-hit areas of Christchurch.

AREC team member Richard Smart ZL4FZ said 10 radio amateurs are using their two emergency broadcast vans to keep rescue teams and Civil Defence staff in touch.

He said one is at a major welfare centre providing portable communication so they can talk to Civil Defence and the other vehicle is en-route to assist search and rescue teams in an area where communication is poor.

Richard ZK4FZ said amateur radio operators from around the country are volunteering to help out and others are sending updates on the disaster to families of people in Christchurch who are overseas.

Former NZART Vice President Stuart Watchman ZL2TW was attending a medical conference and lucky to escape. He told how his hotel swayed and crumbled, managed to free himself and other only to find devastation outdoors and the adjoining building leaning threatening to collapse.

New Zealand Prime Minister John Key said a State of Emergency continued and those in the affected areas needed to keep their resolve and good spirits as the whole country was right behind them. He acknowledged the support already given and being offered from overseas.

The earthquake disaster bill of last September (7.1 at a depth of more than 30 metres) was put at \$8 billion but the latest quake (6.3 and at a depth of just five kilometres) could be double that amount.

Christchurch and its surrounding areas account for 500,000 people, about half the population of the South Island of New Zealand.

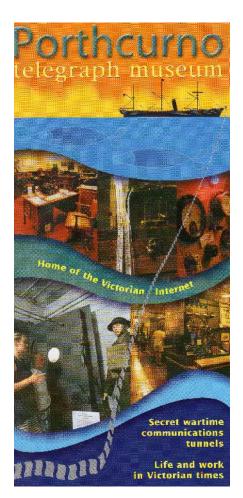
Jim Linton VK3PC, Chairman IARU Region 3 Disaster Communications Committee.

# **PORTHCURNO** Submarine Telegraph Cables By John VK2AYQ

A few years ago whilst touring around Cornwell England we found ourselves in a small town near Land's End, Porthcurno.

I was interested to see listed as a tourist at-

traction was the Porthcurno telegraph museum.



In particular the banner 'Home of the Victorian Internet' was intriguing. Curious now about what the facility was I approached the rather unassuming entrance near the cliff face paid my money and set off to investigate with a cheery "Watch out for the adders; they like the tunnels and consider them their home!" I wasn't sure if this was some Cornish humour brought on by my Australian accent however proceded with caution into the bowels of the hill side.



(Entrance to the Porthcurno Telegraph Station)

I hadn't really thought about submarine telegraph cables and communications before. In the back of my mind was the thought that electronic communications were really a 20 Century thing. It was quite revealing to read that the invention of a practical electric telegraph was developed in 1837 by William Cooke and Charles Wheatsone in Britian and Samuel Morse in America. They developed an electronic communications network that would change the world.

Railway companies and big business initially financed the development of the telegraph as they needed high speed, reliable communications for efficient operations. The telegraph was used extensively and effectively by the North in the American Civil war. Private overland telegraph systems were well established in Europe by 1850.

The discovery of Gutta Percha an natural resin which was used in waterproofing and insulating cables enabled telegraph cables to be laid under the sea. 1851 saw the first successful international cable laid from Dover to Calais to link London to Paris.

A cable was laid across the Atlantic in 1858 unfortunately it failed a few weeks after commissioning. However by the late 1860's a working cable was initiated. By 1870 there was an all submarine telegraph cable link to India which augmented the existing mainly overland telegraph route to India and the Far East.

Porthcurno was the telegraph station for the termination of the Far Eastern submarine telegraph cable and was established in 1870.





(Submarine cables being brought ashore at Porthcurno 1870)

Australia and the Far East were linked up to the submarine cable by 1872 and the Eastern Telegraph Company Ltd formed by John Pender. This company owned 8,860 miles (14,176 Km) of submarine telegraphic cable, had more than 1,200 miles (19,200 KM of landline, 24 stations and two cable repair ships. Its revenue for 1872 was approximately 376,900 pounds (1872 money which was a fortune editor note). The cost of a message from England to India at this time was 4 pounds (compare with texting costs today)

Submarine telegraphic cables had a bandwidth of 50 pulses per second and did not have repeaters built into the cable. This meant that these cables were not suitable for the transmission of voice. Although the telephone had by patented by 1876 it was mainly used for short distance intra continent communications. It was not until the 1950's that

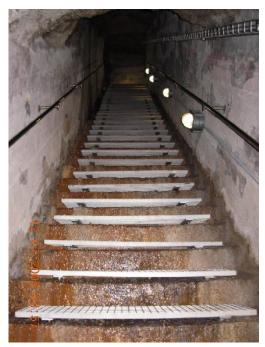


(Cables from the beach being carried to the telegraph station Cornwell).

A new type of submarine cable was developed that would carry telephony and this in turn has been replaced by satellite communications.

The submarine cable companies regarded the development of wireless communications with some suspicion and trepidation. In the early 1900's experiments were being undertaken by Marconi at Poldhu just a few kilometres away from Porthcurno. In fact Marconi's antennas could be seen from the telegraph station. It wasn't until about 1927 that wireless communications started a decline in the submarine cable revenues. In England this led to a unified system of cable and wireless under the name of the Imperial and International Communications Ltd, this name was changed to Cable and Wireless Ltd in 1934.

The present site of the Porthcurno telegraph station was excavated in the second world war under instructions from Winston Churchill. The tunnels and installation being completed within 10 months. The tunnels were cut by Cornish Tin Miners complete with a giant escape stairway to the hilltop above.



(Escape

stairway to hilltop)

Bomb proof blast doors and a self contained power plant were installed making the telegraph station self sufficient.

New developments in communications made the old telegraph stations and the equipment associated with them obsolete.

Porthcurno closed the last of its 14 submarine telegraph cables in 1970 a century after the initial establishment ending an era of communications.

The site now houses the Porthcurno Telegraph Museum, which has an array of fascinating electronics, displays and films of the station's operations.



(A sample of some of the testing equipment on display).

The museum staff were very friendly and said that radio amateurs from the local clubs had set up a portable field station in some of the telegraph stations outbuildings.

I found it really thought provoking walking through the facility thinking about the way in which technology has developed. The 'Victorian Internet' certainly brought fast communications throughout the world however it was out reach of ordinary people.

Oh and the adders in the tunnels? None were seen during our visit although I'm assured that they do come out occasionally for the tourists!

# **OXLEY REGION AMATEUR RADIO CLUB Inc. MEMBERSHIP REGISTER.**

(As at March 2nd 2011)

No	. Cat.	Surname	Given	Spouse Name	Call	Location	Tph
1	0	ANDERSON	KEITH		-	LAKE CATHIE	02 6586.3988
2	0	BAILEY	JOHN	(FLORENCE)	VK2KHB	PORT MACQUARIE	02 6582.2192
3	D	BELL	ALAN	()	VK2BEL	COOLONGOLOOK	02 6554.1689
4	Õ	BIVONA	JOE	(ROSE)	VK2IEV	PORT MACQUARIE	Mob 0405040953
5	Ľ	BLYTH	BOB		VK2XIQ	TELEGRAPH POINT	-
6	D	BRICE	GRAHAM	(CYNTHIA)	VK2VV	SCONE	02 6545.0411
7	0	BRODIE	BOB	(UINIIIII)	VK2EJK	PORT MACQUARIE	02 6582.0592
8	0	BROOKE	AILSA	(BILL)	VK2FABJ	PORT MACQUARIE	02 6581.0547
9	0	BROOKE	BILL	(AILSA)	VK2ZCW	PORT MACQUARIE	02 6581.0547
10	0	BROWN	STEVEN	(AILDA)	VK2VTH	PORT MACQUARIE	02 6584.7885
10	0	BURGES	ROY	(JUNE)	VK2YOR	PORT MACQUARIE	02 6583.8801
12	0	COURT	RICHARD	(LINDA)	VK2CHC	PORT MACQUARIE	02 6584.6872
12	0	DANIEL	JIM	(LINDA)	VK2CHC VK2FJKD	PORT MACQUARIE	
13	0	EDMONDSON	CHARLES	(PAT)	VK2FJKD VK2KCE	PORT MACQUARIE	02 6583.1933 02 6584.0495
14	D	EKERT	BRUCE		VK2KCL VK2EM	FORSTER	Mob 0414532496
15	D	ELLIS	STAN	(YULIA) (DETTV)	VK2EM VK2DDL	TUNCURRY	
10	D 0		PETER	(BETTY)			02 6554.7996
		FLETCHER		CAROLINE [VK2CZF]		PORT MACQUARIE	02 6584.5191
18	0	FROST	ROBERT	(SUSAN)	VK2CF	PAPPINBARRA	02 6587.6129
19	0	GILSON	BARRY	(FAY)	VK2FBRG	PORT MACQUARIE	02 6583.8814
20	0	GREEN	LEWIS	(PAMELA)	VK2AG	PORT MACQUARIE	02 6584.9162
21	0	GREENWOOD	GRAEME		VK2ZIS	MCMAHONS POINT	-
22	L	HANLON	KEITH			PORT MACQUARIE	-
23	0	HANSEN	JOHN		VK2AYQ	PORT MACQUARIE	02 6582.7932
24	0	HARDING	DAVID	(ISABELLA)	VK2AIF	WAUCHOPE	02 6586.4980
25	D	HUTCHESSON	COLIN	(PAULINE)	VK5DK	MOUNT GAMBIER S.A.	08 8725.5527
26	0	HOLMES	JOSH		VK2FJDH	BONNY HILLS	02 6585.5148
27	0	INGS	ALAN		-	SOUTH WEST ROCKS	02 6566.5342
28	D	JANES	LES	(BEVERLY)	VK5JL	SALISBURY HEIGHTS	08 8281.3878
29	0	KOPPEL	HORST		VK2FHKO	LAKE CATHIE	02 6585.5992
30 31	L	LINDSAY	LARRY		VK2CLL	WAUCHOPE DODT MACOUADIE	02 6587.1155
	L	LUNDELL	HENRY		VK2ZHE	PORT MACQUARIE	02 6582.0534
32 33	0	MADIGAN MARTIN	ALLAN	(DAWN)	VK2OA	WAUCHOPE	02 6585.2043
33 34	0	MCGUIRE	CRAIG MARK	(JENNY)	VK2ZCM VK2FMGM	SANCROX	02 6585.3452
34 35	0 0					PORT MACQUARIE	02 6583.8875
35 36	0	MCLEAN MEEHAN	JOHN teddy	(CORRINE)	VK2KC	PORT MACQUARIE	02 6584.6220
30 37	0		TERRY STUART		VK2KL VK2KSM	PORT MACQUARIE BONNY HILLS	02 6584.2997 Mab 0410042216
37 38	D	MELVILLE				BEECROFT	Mob 0419043316
		MILLS	TIM		VK2ZTM		02 9868.1434
39	H	MINAHAN	CHRIS		VK2EJ VK2ATM	HALLIDAYS POINT	02 6559.3516
40 41	L	MONCK	ARTHUR		VK2ATM	PORT MACQUARIE	02 6581.0960
41 42	0 0	NEIL NEWEY	JIM DAVID	(CAROL)	VK2VIV VK2DFN	PORT MACQUARIE PORT MACQUARIE	02 6581.2481 Mab 0420025065
42 43	0			(LEONIE)	VK2LPN		Mob 0430925065
43 44	0	NEWEY	LEONIE	(DAVID)	VK2LPN VK2ELN	PORT MACQUARIE	Mob 0401015220
44 45	D	NEWHAM NIVEN	LAURIE TREVOR	(ROBIN) (BETH)	VKZELN VK5NC	PORT MACQUARIE MOUNT GAMBIER S.A.	02 6583.5387 08 8723.2432
45 46	D 0	PERRETT		(DEIR)			
40 47	0	PERREIT	TONY DAVID	(DEE)	- VK2AYD	PORT MACQUARIE KING CREEK	02 6584.1262 02 6585.2647
47	0	SANDFORD	NEIL	(VERENA)	VK2AID VK2EI	PORT MACQUARIE	02 6582.5830
40	L	SINCLAIR	BILL	(CORALIE)	VK2ZCV	PORT MACQUARIE	02 6583.9302
49 50	ь 0	SMCLAIR	LYLE	(JEANNINE)	VK2ZCV VK2FCVI	WAUCHOPE	02 6585.2497
50 51	D	TARRANT	DAVID	(AILEEN)	VK2TBC	ILUKA	-
51 52	D 0	THATCHER	TREVOR	(AILEEN)	VK2TBU VK2TT	WAUCHOPE	- 02 6585.2278
52 53	0	THOMPSON	DES	(BETTY)	VK211 VK9FLHI	LORD HOWE ISLAND	02 6563 2152
53 54	0	VAN ACKER	GERRY		-	LORD HOWE ISLAND LAURIETON	02 6559.6194
54 55	0	WALKER	BRUCE	(GWEN)	- VK2HOT	PORT MACQUARIE	02 6583.8360
55 56	0	WALKER	MICHAEL	(RUTH)	VK2FMDW	PORT MACQUARIE	Mob 0427291276
00	0	11110D	MECHALL	(10111)	4 17901 14UD AA	I OIVI THIOGOUTUIL	

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