



OXTALES

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Newsletter of the Oxley Region Amateur Radio Club Inc.

PO Box 712 Port Macquarie 2444

Websites: [<http://mypage.tsn.cc/orarc/page2.html>] and

[<http://portmacquarie.yourguide.com.au/viewclub.asp?clubid=1044&pageid=2012>]

March 2006

Compiled by VK2TT & VK2AYQ

PRESIDENT: Bruce Walker VK2HOT 6583.8360
VICE PRES: Alan Nutt VK2GD 6582.3557
TREASURER: John Bailey VK2KHB 6582.2192
SECRETARY: Henry Lundell VK2ZHE 6582.0534

President's Report

Hi All,

Gee! Time flies when you have fun with amateur radio.

First of all I would like to congratulate Sam Baylis-VK2FSLB on obtaining the call sign. I hope you get a lot of enjoyment out of the hobby.

Great to find out the possibility of a new home for the Club - a lot of talking between the two parties will start soon with what I hope is a positive outcome.

I was saddened to hear of the passing of Josie Brodie. Bob, our thoughts are with you at this sad time.

Well the pockets of a few new members and members are now a lot lighter since the Wyong Field Day-radios, antennas etc., were purchased and most are already in use.

The Club did not miss out on spending money either with some badly needed repeater equipment purchased-spotted by Craig VK2ZCM. This will when tuned up and other adjustments made allow the RCN repeater will be put back on air. A backup system is a possibility as well.

The DX scene has been a bit slow but I did get some nice cards handed to me by Craig VK2ZCM on his return from Wyong-thanks McGoo.

I had a go at Echolink while camping at Diamond Head and was able to talk to a couple of G calls which was interesting. From the white cliffs of Dover to the cliffs of

Diamond Head.

Planning for the Field Day is on track.

I must thank F trooper Paul, VK2FORE for all the bits and pieces he has been able to obtain, including dollar donations and prizes. Thanks Paul - keep up the good work. You look like President material to me or at least Field Day organizer.

I will be giving a talk on the QSL system as I see it soon - either on a Friday night or at a monthly meeting.

Cheers for now - take care and watch out for the storm clouds.

- Bruce Walker VK2HOT



Obituary

It is with sadness that we have to report the passing of Josie Brodie, on 22nd February, beloved XYL of Bob ((VK2EJK). Through the pages of OXTALES, the members express sincere condolences to Bob and the Brodie family.

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Down The Coax

Friday Night Get-togethers
Mar. 10th & 24th
7.00pm

John Moyle Field Days
Sat 18th - Sun 19th March 2006

April 2006 Monthly Meeting
Saturday 1st Apr. 2006
2.00pm

Urunga Convention
Easter Sat 15th - Easter Sun 16th April 2006

Friday Night Get-togethers
April 14th & 28th
7.00pm

May 2006 Monthly Meeting
Saturday 6th May. 2006
2.00pm

E-mail directory.

*Reflects ALL changes notified up to
1st March, 2006*

VK2EI (Neil) neilsan@tpg.com.au
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Jim Daniel jaidanl@bigpond.com

Net Controllers' Roster

Nets on Voice Repeater VK2RPM 146.700 Mhz

Sundays (0830 Local)		Wednesdays (1900 Local)	
March 2006			
VK2BZD	Mar-05	VK2ATM	Mar-01
VK2TT	Mar-12	VK2ZHE	Mar-08
VK2OA	Mar-19	VK2AYD	Mar-15
VK2BZD	Mar-26	VK2EI	Mar-22
		VK2GD	Mar-29
April 2006			
VK2TT	Apr-02	VK2ZCM	Apr-05
VK2OA	Apr-09	VK2ATM	Apr-12
VK2BZD	Apr-16	VK2ZHE	Apr-19
VK2TT	Apr-23	VK2AYD	Apr-26
VK2OA	Apr-30		
May 2006			
VK2BZD	May-07	VK2EI	May-03
VK2TT	May-14	VK2GD	May-10
VK2OA	May-21	VK2ZCM	May-17
VK2BZD	May-28	VK2ATM	May-24
		VK2ZHE	May-31
June 2006			
VK2TT	Jun-04	VK2AYD	Jun-07
VK2OA	Jun-11	VK2EI	Jun-14
VK2BZD	Jun-18	VK2GD	Jun-21
VK2TT	Jun-25	VK2ZCM	Jun-28
July 2006			
VK2OA	Jul-02	VK2ATM	Jul-05
VK2BZD	Jul-09	VK2ZHE	Jul-12
VK2TT	Jul-16	VK2AYD	Jul-19
VK2OA	Jul-23	VK2EI	Jul-26
VK2BZD	Jul-30		
August 2006			
VK2TT	Aug-06	VK2GD	Aug-02
VK2OA	Aug-13	VK2ZCM	Aug-09
VK2BZD	Aug-20	VK2ATM	Aug-16
VK2TT	Aug-27	VK2ZHE	Aug-23
		VK2AYD	Aug-30

Sincere sympathy to Steve Hadfield, VK2FSTH, and family, on the sad loss of his father, Roy Hadfield, late of Pappinbarra. Roy passed away on January 15th, 2006.

STOP PRESS : In addition to the new Foundation call signs reported elsewhere in this issue, we have received late breaking news that Sam Baylis has also joined the ranks of the new licensees. On 23rd February, Sam was allocated call sign **VK2FSLB**. Congratulations Sam, and welcome!

Hey! Did anybody spot Sam's pic in the "Port Macquarie News", when he appeared in the "Over to You" column on Friday, 10th February, 2006?

The Slim Jim Revisited

(By Bill Sinclair—VK2ZCV)

The Slim Jim antenna was developed by Fred Judd (SK) and the details first published in Practical Wireless and subsequently in Out of Thin Air and More Out of Thin Air. The name comes from its slender construction and the use of the "J" type Integrated Matching stub (JIM) that feeds the base. The antennae is basically an end fed, vertically operated, folded dipole and has been duplicated in various forms and for different frequencies, throughout the world.

The version to be described came about after some discussions on our local Wednesday night NET. It is an ideal and relatively cheap (approx \$20 at 18-12-2005) antenna to build using only hand tools. All parts are available locally and none are specialised. See figure 1 (Next page) for complete antenna.

PARTS LIST.

- 3 Mtrs. 12mm x 3mm Aluminium Bar.
- 11 S/Steel self tapping screws pan 8G x 12mm.
- 600 mm x 20mm PVC conduit.
- 2 x 50mm x 45mm x 12mm kitchen cutting board.
- 1 x 43mm x 12mm x 12mm kitchen cutting board.
- 1 x 25mm x 50mm x 12mm kitchen cutting board.
- 1 wavelength coax @ 2Mtrs. = 1354mm + 60mm for tails.
- 1 x 12mm x 60mm piece single sided fibre glass PCB.
- 1 coax plug or socket to suit your gear.
- 2 solder lugs 4mm hole.

From information gleaned from various sources the following deductions were made.

The original design frequency was 145 MHz. So this version has been scaled for 146.5 MHz.

It is advisable to feed the antenna with a balanced feed; therefore a "CHOKE" balun has been incorporated. (Cheapest effective method to achieve balance.) See figure 3.

Some form of tuning the antenna to resonance will give some latitude in construction errors. The method used here is taken from Fred Judd's ULTRA SLIM JIM, and consists of a simple capacitor at the high impedance points. It consists of a strip of single sided fibreglass printed circuit board copper side out. See figure 2.

A more accurate method of locating the correct feed point without multiple holes or a slot cut in the elements was deemed necessary. This was achieved by, after assembly of all except the feed point holes in the bar, sliding the feed point insulator with feed coax attached and in contact with the bar, up or down to obtain the match (100mm. in this case.) Holes were then drilled in the bar.

Construction should be evident from the pictures except for dimensions. Lay the flat bar on your working surface and from one end, which will be the top of the "J", mark the first bend centre at 487mm and the second bend centre at 1990mm.


NOTE both measurements from the same starting point.

The two bends may be made by clamping a piece of pipe approx. 40mm diameter vertically in a vice, laying the bar horizontally on the vice top and clamping the bar to the pipe with vice grips or "G" clamp and pulling both ends around the pipe. If all has gone to plan there should be a gap of 15mm between the free adjacent ends. From the longer of these ends cut off 10mm to make a gap of 25mm. Measure along the longer side from the gap 490mm and mount the 43x12x12 piece of cutting board, which acts as a stiffener at a low impedance point. Notch the 25mm x 50mm x 12mm cutting board approx. 6mm or enough that the piece of PCB material when mounted will clear the mounting screws and attach at the gap. The PCB may also be mounted to the centre of this insulator at this time. Clamp the two 50mm x 45mm x 12mm pieces of board together and align carefully. Along the 50mm side at 25mm and in 20mm drill a 20mm hole that is a sliding fit on the conduit. On the opposite face notch each side 3mm as seen in Figs. 2 and 3. Assemble coax plug onto coax and prepare ends for solder lugs. At 170mm from one end of the piece of conduit, wind and secure 10 turns of the coax, refer Figs. 2 and 3. Slide both pieces of prepared cutting board onto conduit and attach with self tapping screws the TOP piece ONLY at 20mm from the top of the conduit and 235mm from the inside of the bottom of the "J". Using tails as short as possible attach with solder lugs and self tapping screws, coax to remaining

block so that the heads of the screws can make contact with the "J" at about 100mm from the bottom. Adjust position of tuning PCB and this block for best match. Attach coax permanently after drilling holes in aluminium at this point. Seal all connections and secure blocks to conduit.

The antenna is now complete. For best operation mount outside as high as possible and in the clear using low loss coax. It may be coated with TECTAL 151 for weather and UV protection.

The 2-1 VSWR points of the prototype is 15 Mhz.

 Figure 1 Complete Antenna.

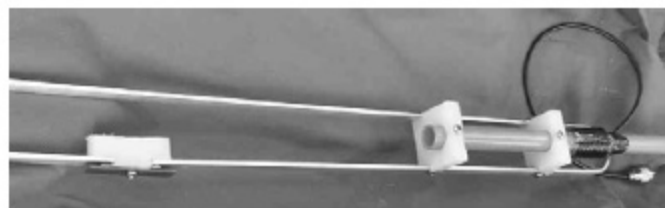


Figure 2
Tuning &
Feed point.

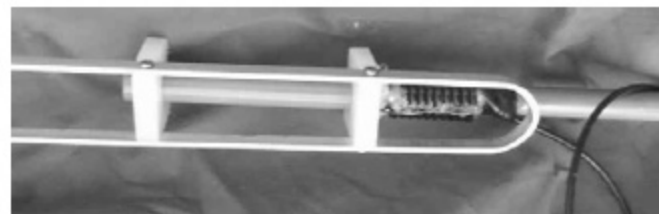


Figure 3
Feed point
and Choke
Balun.

Don't Put Your Daughter on the Stage Mrs Worthington or

Electronics in Today's Theatres

(John Hanson, VK2AYQ)

This is not just a shameless plug for the Players Theatre in Port Macquarie and the magnificent plays, musicals and pantomimes put on during the year. Did I mention Pantomime ? Cinderella was staged in January. It was just the thing to take the grandchildren to during the summer holidays. Anyway back to the plot.

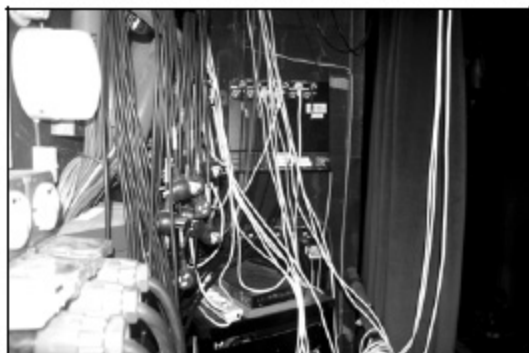


Players Theatre
Lord Street
Port Macquarie

I thought that members might be interested in how electronics are used in the theatre using our own Players Theatre in Lord Street as an example. An overview of basic electronic control systems from old style rheostats to computerised control systems will be outlined over the next couple of issues of OXTALES.

Electronics plays a large part in today's modern theatre and most productions are not possible without a huge mass, sometimes referred to as a mess, of wires and equipment ranging from radio transmitters to digital dimmer racks and dedicated computer controlled lighting desks.

Permanent stage lights are plugged into power points that are terminated in a patch bay. There are usually more power plugs than there are lights. This allows lights to be positioned where they are needed and to connect lamps to dimmers.



A typical patch bay with 3 phase power, analogue and digital dimmer racks

Note 3 Phase supplies 72 plus 24 patch bay and dimmer racks.

In the past lighting control, circuits were dimmers using large resistors or rheostats. The number of lamps that could be dimmed at any one time was limited and the resistors themselves became rather hot!! However, these circuits were a vast improvement on the older system of simply switching lamps on and off.

The unit (right) was used to provide eight channels each capable of dimming lights up to 500 watts. The resistors had to be set up for each scene and were usually brought up when a new scene opened. The wattage of the lamps controlled with these restive units was a maximum of 500 watts. The lighting operator had to work quickly in positioning the rheostats for the various lights and scenes. The lighting control dimmers were usually located close to the stage in a lighting loft.

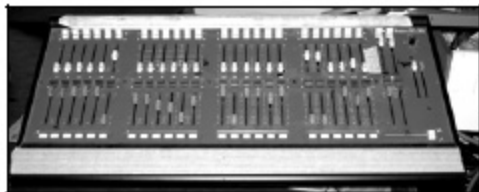
Analogue control desks provided lighting operators with increasing number of features. A popular unit used by many theatres provided dimmer control of 24 channels and in addition provide a method to preset the next scene. The lighting operator could then fade from one scene to another and then quickly set up the following scene.

The development of high-powered semi-conductors provided a breakthrough in theatre light control. It became possible to separate the lighting dimming controllers from the immediate stage area. Lighting operators could now see an audience view of the stage and use a lighting desk connected to the dimming devices (usually called racks). These initial systems were analogue controlled with relatively low voltages providing the dimmer inputs. Each channel on the lighting control desk was connected to a dimming semiconductor in the lighting rack and each channel carried an analogue voltage to vary the light level.

These boards were called 24 channel preset analogue boards. (cont'd over page)



Old style resistive 8-channel dimmer unit



A typical 24 Channel preset lighting board.

The analogue dimmer racks typically were capable of controlling loads of up to 2,400 watts per channel (240Volts by 10 amp maximum load). A typical set up for small theatres was a 24 Channel Preset lighting controller with two 12 channel lighting racks. Each rack being powered by a 415 Volt three phase electrical supply. As far as possible the lighting load was balanced across the three phases to try and present a balanced load. Unbalanced loads sometimes caused unexpected and unwanted dimming of lights across the lighting racks. All lighting loads were resistive (lamp filaments) as these dimmers often would provide peculiar effects when used on inductive loads (electric motors, fluorescent tubes etc).

Analogue systems were a mainstay of theatre lighting control for many years and evolved into complex systems and even computerised systems. However analogue systems were not without their problems. As the control systems were by means of different voltage levels on the control lines they were quite prone to electronic 'noise'. Electronics were increasingly being used in theatres, ranging from high powered sound systems, radio transmitters used for communications between theatre workers and radio transmitters worn by actors that are patched into the sound systems. The effects of unwanted voltages on the control lines gave unpredictable dimmer control, resulting in unwanted lamp variations.

Stay tuned for the next instalment on going digital and computerised control. Want to see how the systems work in practice? Drop around to see one of the many performances at the Players Theatre.



Congratulations to our first successful Foundation Licence Examination Graduates! L to R Sean Rowe, Barry Gilson, Paul Graham, Steve Hadfield, and Paul Jones All passed the examination on Saturday, 7th January (see *Item Next page*)

New Calls on The Block

Saturday, January 7th 2006 saw the graduation of five new amateurs in the district.

Our club's Accredited Assessors, Alan, VK2GD, and Larry, VK2CLL examined the five candidates pictured on page 6 and all five passed the Foundation Licence assessments. Congratulations to all.

It did not take long for applications for licences to be lodged and processed. We now have Sean Rowe, VK2FSTR, of Wingham, Barry Gilson, VK2FBRG, of Port Macquarie, Steve Hadfield, VK2FSTH of Pappinbarra, and Paul Jones, VK2FORE, of Port Macquarie all up and appearing on air.

Barry, Steve, and Paul Jones, are all now current FULL members of ORARC. At the February club meeting these three members were presented with their membership badges by the President, Bruce, VK2HOT. They were willing to pose for the **OX-TALES** paparazzi following the presentation, and they are pictured below.

The advent of the Foundation Licence has injected some fresh enthusiasm into the hobby, and this will no doubt be reflected in an increase in membership and more activity on the bands and in the various home workshops where there is a great potential for motivation in the field of "Home-Brewing". Welcome to the hobby, Gents. It gets even better!

Poignant Pix From the Past

Sad to say, we have finally scraped bare, the bottom of the barrel to get that last picture of this series. Nobody has since come forth from the membership with a youthful image of themselves or fellow members. Until such times as we can get some more, this will mark the end of the current series.

The ORARC mystery Personality in January **OXTALES** was Trevor Thatcher (VK2TT) The picture was taken way back in 1959. (Some 47 cruel, degenerative years ago !)

Anybody out there pick him?

Yes! Joe, VK2IEV got him for sure, and Bruce, VK2HOT was vaguely suspicious.



Three Caballeros





OXLEY REGION AMATEUR RADIO CLUB Inc.
MEMBERSHIP REGISTER.
 (As at 1st March, 2006)

Cat.	Surname	Given	Spouse Name	Call	Location	Tph
1	O	BAILEY	JOHN (FLORENCE)	VK2KHB	PORT MACQUARIE	02 6582.2192
2	F	BAYLIS	SAM	VK2F5LB	LAKE CATHIE	-
3	L	BAYLIS	JOHN (MARY)	VK2JB	LAKE CATHIE	02 6585.5703
4	D	BELL	ALAN	VK2BEL	COOLONGLOOK	02 6554.1689
5	O	BIVONA	JOE (ROSE)	VK2IEV	PORT MACQUARIE	Mob 0405040953
6	L	BLYTH	BOB	VK2XIQ	PORT MACQUARIE	-
7	O	BRODIE	BOB (JO)	VK2EJK	PORT MACQUARIE	02 6582.0592
8	O	BROOKE	BILL (AILSA)	VK2ZCW	PORT MACQUARIE	02 6581.0547
9	O	BURGES	ROY (JUNE)	VK2YOR	PORT MACQUARIE	02 6583.9349
10	O	COULTER	KEVIN (JUNE)	VK2MAM	PORT MACQUARIE	02 6583.8325
11	O	COURT	RICHARD (LINDA)	VK2CHC	BEECHWOOD	02 6585.6866
12	A	DANIEL	JIM	-	PORT MACQUARIE	02 6583.1933
13	O	EDMONDSON	CHARLES (PAT)	VK2F5H	PORT MACQUARIE	02 6584.0495
14	D	ELLIS	STAN (BETTY)	VK2DDL	TUNCURRY	02 6554.7996
15	F	GILSON	BARRY (FAY)	VK2FBRG	PORT MACQUARIE	02 6583.8814
16	O	GLEESON	BADEN (VALERY)	VK2MOQ	PORT MACQUARIE	02 6582.2018
17	A	GRAHAM	PAUL (JANE)	-	WAUCHOPE	02 6586.4720
18	O	GREEN	LEWIS (PAMELA)	VK2AG	PORT MACQUARIE	02 6584.9162
19	O	GREENWOOD	GRAEME	VK2ZIS	MIDDLE BROTHER	02 6559.4836
20	F	HADFIELD	STEVE	VK2F5TH	PAPPINBARRA	02 6587.6160
21	L	HANLON	KEITH	-	PORT MACQUARIE	-
22	O	HANSEN	JOHN	VK2AYQ	PORT MACQUARIE	02 6582.7932
23	O	HARDING	DAVID (ISABELLA)	VK2AIF	WAUCHOPE	02 6586.4980
24	F	JONES	PAUL (SANDRA)	VK2FORE	PORT MACQUARIE	02 6584.3772
25	L	LINDSAY	LARRY	VK2CLL	WAUCHOPE	02 6587.1155
26	L	LUNDELL	HENRY	VK2ZHE	PORT MACQUARIE	02 6582.0534
27	O	LUTTON	KEITH (GWEN)	VK2KDL	TELEGRAPH POINT	02 6585.0321
28	O	MADIGAN	ALLAN (DAWN)	VK2OA	WAUCHOPE	02 6585.2043
29	O	MARRIOTT	JOHN (ROSE)	VK2CIF	NORTH HAVEN	02 6559.9245
30	O	MARTIN	CRAIG	VK2ZCM	SANCROX	02 6585.3452
31	O	MCLEAN	JOHN	VK2KCE	PORT MACQUARIE	02 6583.7400
32	O	MEEHAN	TERRY	VK2KL	PORT MACQUARIE	02 6584.2997
33	H	MINAHAN	CHRIS	VK2EJ	HALLDAYS POINT	02 6559.3516
34	H	MONCK	WENDY (ARTHUR)	-	PORT MACQUARIE	02 6583.1311
35	L	MONCK	ARTHUR (WENDY)	VK2ATM	PORT MACQUARIE	02 6583.1311
36	O	NEIL	JIM (CAROL)	VK2VIN	PORT MACQUARIE	02 6588.0016
37	O	NEWHAM	LAURIE (ROBIN)	VK2ELN	PORT MACQUARIE	02 6583.5387
38	O	NUTT	ALLAN (ELAINE)	VK2GD	PORT MACQUARIE	02 6582.3557
39	O	PALMER	GRAHAM (LINDA)	VK2TRM	KENDALL	02 6559.4554
40	A	PATERSON	BRENTON	-	PORT MACQUARIE	02 6582.0155
41	O	PILLEY	DAVID (DEE)	VK2AYD	KING CREEK	02 6585.2647
42	O	ROTH	BILL	VK2CWR	PORT MACQUARIE	02 6581.1776
43	O	SANDFORD	NEIL (VERENA)	VK2EI	PORT MACQUARIE	02 6582.5830
44	O	SINCLAIR	BILL	VK2ZCV	PORT MACQUARIE	02 6583.9302
45	D	TARRANT	DAVID (AILEEN)	VK2TBC	ILUKA	-
46	O	THATCHER	TREVOR (PHYLLIS)	VK2TT	WAUCHOPE	02 6585.2278
47	D	WALKE	GARY	VK2UHF	ROCKDALE	-
48	O	WALKER	BRUCE (GWEN)	VK2HOT	PORT MACQUARIE	02 6583.8360
49	O	WEBSTER	JIM (MARY)	VK2BZD	PORT MACQUARIE	02 6582.4037

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