

Oxtales



OCT. 1999

President: Charles Edmunson	VK2FSH	6584.0495
Vice Pres: Bruce Walker	VK2HOT	6583.8360
Treasure: Roy Burges	VK2YOR	6583.9349
Secretary: Alan Nutt	VK2GD	6582.3557

Inside this issue:

73 from VK2TT	1
Solar Indices	2
Editor's Corner	2
ELF & VLF Com.	3
Surf the Web	3
Down the Coax	3
PSK31 The New	4
Billy-Cart Derby	4
DX Report	5
Muck Donald's	6
The Gig Guide	7
My Word	8
Wauchope JOTA	9
Port JOTA	10
HF Beacons	11
Membership List	12

73 From the Retiring Editor.

The August 1999 issue of OXTALES was my last attempt in the chair before handing over to our new editor, Larry (VK2IPO).

During the several years I was entrusted with the compilation and editing of our Newsletter, I received a great deal of pleasure and satisfaction from dragging together and presenting what I hoped were items of interest to the readership. It is not without a little sadness that I have relinquished the job to Larry, but a change was well overdue, and with a willing and ready volunteer prepared to take over, it worked out very satisfactorily to make the change at this time.

I would like to thank those members who provided support in the form of contributions for inclusion in the OXTALES pages. Particular mention should be made of David (VK2AYD) and John (VK2JJ) whose volume of contributed material was substantial to say

the least, and was greatly appreciated.

My sincere thanks is also due to Bill (VK2ZCV) for his generous contribution of photocopying facilities (and tolerance of my periodical invasions of his office space when I needed access). Ian (VK2XU) provided valuable support to the club, and eased my burden, by personally delivering a high percentage of each issue to the membership. Thank you Ian.

Last, and by no means least, I must express my appreciation to Larry (VK2CLL) who was the designer of the masthead and presentation format that OXTALES carried during the years of my involvement. I endeavoured to maintain that presentation as closely as possible, because it was of a unique and original construction that sat very nicely in place

alongside other notewor-



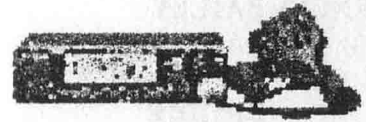
Hot off the press. VK2TT relinquishes editorship

thy club newsletters. To the new Larry (VK2IPO), my best wishes are for an enjoyable and satisfying stint with OXTALES. I am sure you can look forward to a similar level of support that I received. *[Pssst! By the way, Larry, the readers rarely complain, and then it is usually only when, through some quirk of fate, they fail to get their copy of OXTALES - which I am sure some use only as a telephone directory!]*

73 de Trevor (VK2TT)

Special points of interest:

- PSK31 the new digital mode.
- Invitation to VK2IPO Home Page.
- Muck Donald's
- The DX Corner.
- JOTA



2 METRE SSB BEACONS

144.410	VK2RBC	ACT-SE NSW	QF44
144.420	VK2RSY	SYDNEY	QF56
144.430	VK3RTG	MELBOURNE	QF22
144.440	VK4RTT	SE QLD	QG62
144.444	VK4RTL	TOWNSVILLE	QH30
144.450	VK5VF	DELAIDE	PF95
144.460	VK6RPH	PERTH	OF88
144.474	VK7RAE	N/W TASMANIA	QE38
144.480	VK8VF	DARWIN	PH57
144.485	VK8RAS	ALICE SPRINGS	PG66
144.530	VK3RGL	GEELONG	QF22
144.534	VK3RGI	LATROBE VALLEY	QF31
144.550	VK5RSE	SE SOUTH AUST	QF02
144.560	VK6RBU	SW WEST AUST	OF76
144.564	VK6RTW	SOUTHERN WA	OF84
144.568	VK6REP	SE WEST WA	PF06
144.576	VK6RXM	NW WEST WA	OG78

6 METRE SSB BEACONS

50.046	VK8RAS	ALICE SPRINGS	PG66
50.0535	VK3SIX	WEST VICTORIA	QF02
50.056	VK8VF	ARWIN	PH57
50.057	VK7RAE	N/W TASMANIA	QE38
50.058	VK4RGG	GOLD COAST	QG62
50.066	VK6RPH	PERTH	OF88
50.0775	VK4BRG	MACKAY	QG48
50.087	VK4RTL	TOWNSVILLE	QH30
50.304	VK6RXM	N/W WEST AUST	OG78
50.306	VK6RBU	S/W WEST AUST	OF76
50.308	VK6RTW	SOUTHERN WA	OF84
52.325	VK2RHV	HUNTER VALLEY	QF57
52.345	VK4ABP	WESTERN QLD	QG26
52.370	VK7RST	HOBART	QE37
52.420	VK2RSY	SYDNEY	QF56
52.445	VK4RIK	AIRNS	QH23
52.450	VK5VF	ADELAIDE	PF95

10 METRE BEACONS

28.200	VK6RBP	PERTH	OF78
28.2535	VK3SIX	WEST VIC	QF02
28.260	VK5WI	ADELAIDE	PF95
28.262	VK2RSY	SYDNEY	QF56
28.264	VK6RWA	PERTH	OF78
28.266	VK6RTW	ALBANY WA	OF84
28.267	VK7RWC	WEST COAST TAS	QE28
28.268	VK8VF	DARWIN	PH57
28.270	VK4RTL	TOWNSVILLE	QH30

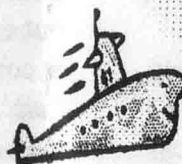
ELF & VLF Communications

In September our President Charles, VK2FSH, was in Exmouth, W.A. admiring the 1,000ft (300m) high towers that are used to communicate with submarines.

For years VLF signals (3 to 30 kHz) has been used to communicate with submarines, however it has problems as it can only penetrate to a depth of 10ft (3m). To achieve one way communications to a depth of 300ft (100m), it is necessary to resort to Extremely Low Frequen-

cies (ELF 300Hz to 3 kHz). ELF systems require very long antenna's. The U.S. "Austere" ELF system, for example, has an antenna 200 Km in length. It suffers from inevitable natural noises and has a very low data rate. It takes 15 minutes to send just one 3 letter group. However, with 3 letters some 17,526 coded messages be sent. For example a 3 letter code could tell a submarine to come to the 3 metre level to receive a complete and long

message on VLF. The original ELF plan called for a chain of transmitters positioned over a 1,600Km line. However this was impractical. Aircraft have also been used



for VLF transmissions. 747 AWACS used 100 Kw and 4 Km trailing antenna's. So next time you have problems with putting up a 160m antenna, think of the VLF installations. (From RNARS. VK2AYD)

SURF THE WEB

During some of my travels across the "Information Highway" I have ran across some very nice pages. Here are a few of them for your surfing enjoyment:

For the puzzle minded, Pandora's Box is highly recommended. A trial version is available from: <http://www.microsoft.com/games/pandorasbox/>

Anything you could possibly want to know about

McDonald's or McLibel nestles somewhere in our 21,000 files. <http://www.mclibel.org> and <http://www.mcspotlight.org> Try a Beaut SSTV program at <http://www.siliconpixels.com/> Get your QSL card maker program at <http://users.tm.net/ijmcd/download/QslMake.zip>

Submitted by VK2IPO
And VK2JJ (John)



DOWN THE COAX

15TH December

Time: 10:00 a.m.

**Xmas BBQ at VK2JJ's
Lot 17 Lakeside way
Lake Cathie**

PSK31 THE NEW DIGITAL MODE

Submitted by VK2IPO

In spite of new DSP technology appearing in H.F. data modes, traditional RTTY has maintained its popularity. There is evidently a special quality in RTTY that is missing in newer modes. It may be that RTTY is easier to use, or more "hands-on", or more sociable since you can listen-in and join-in which an ARQ link cannot do. It may just be because RTTY is cheaper. A new mode is emerging over the last year which may bridge the gap between RTTY and the high-tech modes. Based on an idea by SP9VRC, the PSK31 mode is based on the use of low-cost DSP starter kits and public-domain software, using modern DSP techniques to implement a basic live-QSO transmit-receive

keyboard-to-screen mode. The bandwidth of PSK31 is much lower than any other data mode, which means it can work at lower signal levels in today's crowded bands.

The basic idea of PSK is that keying is done by phase-shifting the carrier rather than frequency-shifting it. The bandwidth is equal to the baudrate rather than to the shift plus the baudrate.

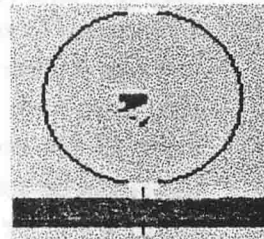
With the chosen baudrate of 31.25, that brings the bandwidth down from the 300-500Hz of other modes down to 31Hz. By using an alphabet similar to morse with short codes for common letters, the text speed of PSK31 comes out at about 50 wpm. By using the narrowest possible filters in the transmitter and receiver, the

performance of PSK31, even without error-correction, is certainly better than most, and has the added advantage for live QSOs that the performance degrades very gracefully as the signal drops. For paths where errors occur in bursts rather than randomly, PSK31 can be switched

to use a convolutional code at the transmitter and a matching Viterbi decoder at the receiver. QPSK, with 4 phase-shifts instead of two, is used for this, but the bandwidth and text speed stay the same. The price paid for this robustness is a tighter frequency stability requirement

and a delay of 640mS in the decoder.

You can download this free shareware program at: <ftp://det.bi.edu.es/pub/ham/psk31/p31sbw107.zip> Also



Spectral tuning meter

there is a "Front-End" program that you should get for it that allows you to use "Type-Ahead"

buffers and send brag files etc. It runs simultaneously in a separate window and controls the TX/RX of the main program itself. There are 2 files. They can be downloaded at: http://wd5gnr.virtualave.net/pgnr33_1.exe and http://wd5gnr.virtualave.net/pgnr33_2.exe

BILLY-CART DERBY

ORARC members once again provided the communications facilities for this annual charity event at the village of Beechwood, on Sunday, 10th October. This year the event, organized by the

Lions Club, was raising funds for the exemplary charity, Putting Wheels Under Kids. Wall-to-wall blue, with a temperature peaking around the



32 degrees C mark, provided ideal conditions for the event and for the relatively larger crowd that attended to witness this year's classic. Club members Char

les (VK2FSH), Ian (VK2XU), John (VK2VY), Roy (VK2YOR) and yours-truly turned up

Continued on page 5

(Continued from page 7)
winds. I use a 12V 38AH Gel Cell and use the weight to stabilize the tripod. This works well in 30 - 40 knot winds often experienced during

evaporative coastal ducting. My farthest distance worked is 612.8Km and Wal has the World Record at 1912.1KM across the South Australian Bight. It is only a

matter of time before the VK2 record is extended, hopefully this coming season when there are suitable coastal ducts.
73 Neil VK2EI.

My

WORD



Those Esperanto enthusiasts have a job ahead of them if they expect their language to take over from English in the international popularity stakes. In the weeks before a recent European tour my chief concern was to prepare in various languages a list of emergency phrases, such as quote "Help me I am lost", "Take me to my hotel" or "Where can I find some toilet paper?" (That's not as funny as you might think.)

Armed with my renewed confidence in school boy French I marched into the first European stop—a Paris quick take-away—and asked for coffee with milk. The fact that I accidentally asked in Italian did not phase the girl behind the counter, who responded in perfect English with "Drink here or take-away?"

Outside the same shop a girl was handing out samples of after shave lotion. Mike Rogers from Tamworth and I accepted a sample each and our "merci" was greeted with "You're welcome". A suave looking Italian offered my wife a bunch of grapes (I am always suspicious of Italians offering grapes to women) and her "grazie" drew the response "They are clean; I've just washed them".

After that we gave up. The tour director with us ("I am a tour director not a tour guide") said she had plenty of examples of confusion in translation between people who try inexpertly to converse in the language of an-

other country but the overwhelming evidence was that English is becoming a common language. Nevertheless we still have a way to go.

Trafalgar provided a few examples of things that have gone wrong:

*In a Bucharest Hotel: The lift is being fixed for the next day. During that time we regret that you will be unbearable.

*In a Belgrade Hotel elevator: To move the cabin, push wishing floor. If the cabin should enter more persons, each one should press a number of wishing floor. Driving is then going alphabetically by national order.

*In a Paris Hotel elevator: Please leave your values at the front desk.

*In a Yugoslavian Hotel: The flattening

of underwear with pleasure is the job of the chambermaid.

*In the lobby of a Moscow Hotel across from a Russian Orthodox monastery: You are welcome to visit the cemetery where famous Russian and Soviet composers, artists and writers are buried daily except Thursday.

*In a Austrian ski chalet: Not to perambulate the corridors in the hours of repose in the boots of ascension.

*On the menu in a Swiss restaurant: Our wines leave you nothing to hope for.

*In a Rome laundry: Ladies, leave your clothes here and spend the afternoon having a good time.

*On the faucet in a Finnish washroom: To stop the drip, turn cock to the right.

*A sign in the Black
(Continued on page 9)

(Continued from page 5)

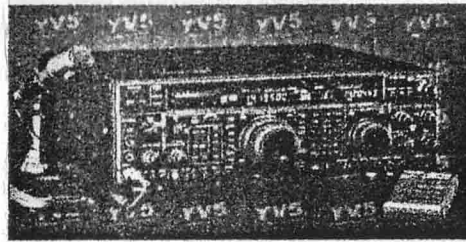
after 0000z. He is located on Cheju Island, IOTA AS-026.

SVALBARD, JW. JW2IJ has been QRV using RTTY on 20 meters around 2300z. QSL via LA2IJ.

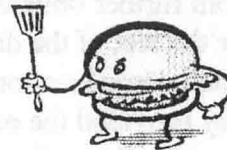
MIDWAY ISLAND, KH4. Dick, KH4/W4ZYV, has been QRV on 14242 kHz from 0800 to 0900z. QSL to home call.

BRAZIL, PY. Look for ZX7G to be QRV from Fortaleza de Nazare Island, from October 8 to 11. Activity will be on 80 to 10 meters, using CW and SSB. QSL via PY7MEU.

BURKINA FASO, XT. Mako, JA1OEM, will be active as XT2HP from October 8 to November 3. He will use CW and SSB on 160 to 10 meters.



CQ CQ CQ Dog-Xray



WUCK DONALD'S

This is an actual job application someone submitted at a McDonald's fast-food establishment.....and they hired him!

NAME: Greg Bulmash

DESIRED POSITION: Reclining. Ha ha. But seriously, whatever's available. If I was in a position to be picky, I wouldn't be applying here in the first place.

DESIRED SALARY: \$185,000 a year plus stock options and a Michael Ovitz style severance package. If that's not possible, make an offer and we can haggle.

EDUCATION: Yes.

LAST POSITION HELD: Target for middle management hostility.

SALARY: Less than I'm worth.

MOST NOTABLE ACHIEVEMENT: My

incredible collection of stolen pens and post-it notes.

REASON FOR LEAVING: It sucked.

HOURS AVAILABLE TO WORK: Any.

PREFERRED HOURS: 1:30-3:30 p.m., Monday, Tuesday, and Thursday.

DO YOU HAVE ANY SPECIAL SKILLS?:

Yes, but they're better suited to a more intimate environment.

MAY WE CONTACT YOUR CURRENT EMPLOYER?: If I had one, would I be here?

DO YOU HAVE ANY PHYSICAL CONDITIONS THAT WOULD PROHIBIT YOU FROM LIFTING UP TO 50

LBS?: Of what?

DO YOU HAVE A CAR?: I think the more appropriate question here

would be "Do you have a car that runs?"

HAVE YOU RECEIVED ANY SPECIAL AWARDS OR RECOGNITION?:

I may already be a winner of the Publishers Clearinghouse Sweepstakes.

DO YOU SMOKE?: Only when set on fire.

WHAT WOULD YOU LIKE TO BE DOING IN FIVE YEARS?: Living in

the Bahamas with a fabulously wealthy super model who thinks I'm the greatest thing since sliced bread.

Actually, I'd like to be doing that now.

DO YOU CERTIFY THAT THE ABOVE IS TRUE AND COMPLETE TO THE BEST OF YOUR KNOWLEDGE?:

No, but I dare you to prove otherwise.

SIGN HERE: Scorpio with Libra rising.

Both Wal and I are using the well proven 10GHz units designed by Charles Suckling G3WDG. The main transverter consist of:

1 G3WDG-002 Rx converter 37 X 111 X 35mm
 2 G3WDG-003 Tx converter in a tinplate box 74 X 111 X 35mm
 3 G4DDK-004 Local Osc unit 56 X 148 X 35mm. The Local Osc starts of with a 106.5MHz very stable Butler crystal oscillator. This is followed by a X3 and three X2 multipliers to give an output of 2556Mhz at about 10mW. The 2256MHz is fed to a MIC amp and 3dB splitter in the TX unit. One output of the splitter is fed to the Rx unit, multiplied by X4 to 2556MHz and mixed with the 10368MHz Rx signal to give an IF of 144MHz. The other LO output feeds a X4 multiplier in the Tx unit and mixed with the 144Mhz IF to produce the 10368 MHz output. This is amplified by five MGF1302 GaAs fets with 3 cavity filters to give a CW or SSB output of between 80 - 100mW.

The Rx has two MGF1302's and a cavity filter ahead of the mixer. The NF is in the order of 3 to 4dB The 144MHz IF is provided by an IC202 CW/SSB transceiver (1970 vintage) which tunes 144.0 144.4MHz giving an output range of 10368.0 10368.4MHz. I have reduced the IC202 normal 3W Tx output to about 50mW to conserve portable battery power. Also have built in an Eprom keyer with selectable call sign and dash to

aid in weak signal detection.

My portable unit is also fitted with an additional G3WDG-004 1dB NF Hemt Rx preamp and a G3WDG-006 200mW Tx amp. The Tx/Rx changeover is selected by a miniature SMA connector microwave relay. There is also a low volt drop power regulator and a sequencer board for the Rx/Tx PTT changeover. This is controlled by 9V DC fed via the IC202 144MHz cable on Tx.

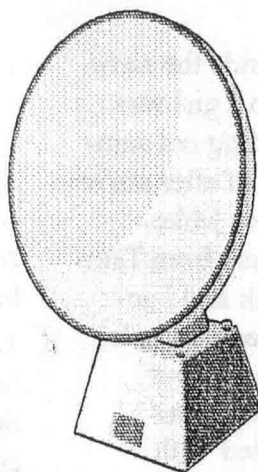
A 57cm parabolic dish is feed with WG16 waveguide and a modified "penny" feed giving a gain of about 33dB (2000 times) which produces a Tx ERP of approx 350W! The beamwidth to the 3dB points is 4.5° so care is required with the pointing. The complete unit is mounted on a homemade tripod which has a 360° setting circle. The tripod is set roughly to true north then an adjustment allows accurate setting by means of a compass or a small telescopic sight that can be set on a known landmark. Likely sites are selected from maps and the distances and path bearings are calculated by computer software developed by

VK3UM. The bearings are calculated to 0.1° and distances to 0.1Km. Where ever possible 2M is used for liaison or failing that usually 40M

with an IC706 MKII. We use a system where I transmit on the even 5 minutes and Wal VK6KZ transmits on the odd 5 minutes.

One runs the keyer while the other listens and gives a short

call on SSB at the end of the period. We agree likely start times and the number of Tx/Rx cycles beforehand. On many occasions we have made contacts on 10GHz when no other liaison freq. has been available to us! Once the gear has warmed up after about 15 mins, only a slight touch is required on the RIT during overs. This is especially so at night when the temperatures are relatively stable. We have evolved simple techniques for securing the tripod in heavy



He who hath an ear let him hear.....

(Continued on page 8)

(Continued from page 4)
to provide the required communications for the planned

supporting event (The Fun Run), and the Derby itself. Larry (VK2IPO) popped over to take a look-see, in case some OXTALES material was offering, and to lend a hand if required.

Due to an apparent glitch in the organizer's planning process, the usual Fun Run did not take place. Although communications coverage for this event had been requested of us by the organizers, and confirmed as recently as the Thursday preceding the event, it somehow fell through a crack. It was irritating, to say the least, that we were not previously advised of

this omission, because a few of us could well have spent the extra time between the sheets on that Sunday morning and avoided both the early rise and the need to travel to the venue. Apologies to Ian, Charles and John who were the most inconvenienced. (The apologies are exclusively mine, gents... I have had no comment yet from the organizers!) Consequently, the redundant early risers were released from further obligations for the rest of the day... small compensation! Roy provided the equipment for the main event's commentary vehicle and was the operator-in-charge for the exciting run down the hill ahead of the 12 gravity powered vehi-

cles. It took only 8 minutes and 7 seconds between the first vehicle's departure from the starting grid and the first arrival at the finish line.

The **ORARC** member's responsibilities were discharged in the usual quiet and efficient way, and the club did receive a formal mention in the credits when they were broadcast over the PA to the assembled throng. One would hope that any subsequent media coverage may also include some mention of our contribution.

My personal thanks is extended to the above mentioned members who made up the team. 73 de VK2TT

DX REPORT



MALAWI, 7Q. Harry, 7Q7HB, is active, time and work permitting, from the south west shore of Lake Malawi. QSL via G0IAS. Meanwhile, Eli, 7Q7CE, has been QRV on 10 meters just after 1315z. QSL Via IN3VZE.

BURUNDI, 9U. Ragge, SM5DIC, is QRV as 9U5D and will be here until Christmas. He is active on all HF bands and 6

meters. QSL via SM0BFJ.
UNITED ARAB EMIRATES, A6. Jamal, A61AO, has been QRV on 80 meters SSB around 0200z. QSL via N1DG.

EASTER ISLAND, CE0. CE0YA has been QRV on the low end of 15 meters around 0400z. QSL via JA6BDB.

IRAN, EP. Abdollah, EP2FM, has been QRV using SSB on 14186 kHz around 0400z.

FRENCH GUIANA, FY. Baldur, DJ6SI, is QRV as FY/DJ6SI until October 15. Look for him around 1828, 3508, 7002, 10102, 14025, 18085, 21025, 24902 and 28025 kHz. QSL to home Call.
SOUTH KOREA, HL. Yang, HL4HLD, has been QRV on 15 meters CW just

(Continued on page 6)

(Continued from page 8)

Forest: It is strictly forbidden on our Black Forest site that people of different sex, for instance, men and women, live together in one tent unless they are married with each other for that purpose.

*In the office of a Roman doctor: Specialist in women and other diseases.

*In a hotel in Athens: Visitors are expected to complain at the office between the hours of 9 a.m. and 11 p.m. daily.

*In an Acapulco hotel: The manager has personally passed all the water served here.

*In a Copenhagen airline ticket office: We take your bags and send them in all directions. **Port Express: Laurie Barber**



WAUCHOPE SITE

On Saturday 16th October, David (VK2DAL), David (VK2AYD) and Trevor (VK2TT) provided VHF and HF stations at the 1st Wauchope Guides Hall.

Setup of the stations began at 8.00am. Assistance with the rigging of a temporary vertical antenna on the flag pole on the roof of the hall, was given by the OM of the Guide Mistress, and after the forgotten radials were ultimately installed, the HF station was fired up with success. VHF performance was quite satisfactory with an "inside" antenna, but this was later relocated on the hall roof to give better chances of wider coverage.

The attendance was a little down on previous years, but the interest was encouragingly high,

and the Brownies and Guides were always at the ready to take the microphones when contacts were made.

Conditions on HF were remarkably good compared to previous years, particularly on 20 metres. Approximately 90% of the time between opening at 1000 local and closure at 1610 was occupied with good links to other JOTA stations. The path to Tasmania remained opened throughout the entire period, and most of our contacts were with VK7 stations. New Zealand was our best DX contact.

On VHF, activity was lower than expected, and it was not possible to fully meet the demands of the young participants by continuously providing them with a distant party for some chitchat. Despite the relatively small number of contacts on VHF, the interest of the guides and brownies was most encouraging. We did not need to "go chasing up business" because there was always a willing

"communicator" ready to take the mike when a contact was made.

The operator's nourishment needs were well catered for. Guides and Brownies, under the supervision of their leaders, staged a "cook-up" of chocolate chip muffins which they distributed with coffee as required, and a sausage sizzle luncheon was served "on the run".

At the closure of the session, the three operators were presented with a token of appreciation from the guides, brownies, and their leaders. It was a card, specially prepared and signed by the girls, expressing their thanks for our services, and carrying three shoulder patches embroidered with the JOTA 1999 insignia.

Overall, the day was a simple but pleasing exercise, with minimal effort on our part, that was clearly appreciated and enjoyed by all of those who took part.

Submitted by Trevor VK2TT



Port Macquarie Site

Yes, it was **JOTA** weekend again this October 16th. Weekend. And, the **ORARC** team of volunteers were "*Johnny on the spot*". It was a beaut day for the occasion. There was a bit of coordinating on 2 metres to be done to figure out who was elected to go get the club transmitter and G5RV ariel. Charles, VK2FSH volunteered his services. I arrived about 9 a.m. loaded for "*Bear*" with my *SSTV Station*, including my *laptop computer*.

There were lots of smiling faces when I walked into the building and the warm G'Day Mate by all who inhabited the establishment of this very special event. With no further adieu, equipment setup was next. It was decided that the club Icom 738 would be the main 20 meter voice rig for the scouts QSO's. It was secured, and Graeme Pilcher, Sea Scouts leader grabbed the mic and started the ordeal.

The list of the contacts were as follows:
VK4HE, VK4SPP, ZL2BAV, VK7KGR,
VK3DBP, VK3SDR, VK7EA, VL3SDK,
P29JOA, ZM2ARG, VK3SDS, VK6SDC.

I made the following contacts:

ZL2UWJ and ZM4WWW sent me the picture above on the right from JOTA in New Zealand

on SSTV.

I would like to give special recognition to the following people for heading up this project and staying till it was all over.

Jim Webster – VK2BZS – PORT
Charles Edmondson – VK2FSH
John Bailey – VK2KHB – PORT
Shirley Conner – My Wife

Thanks to Bruce VK2HOT for showing up and his help setting up as well. All those who showed and helped, my thanks folks! Once we got going, I worked 15 meters and the Graeme headed up the scouts on 20 meters. It was a hard go, as the radios seemed to interfere with each other. But, there were plenty of contacts to be made. And the scouts kept busy all afternoon talking to their hearts content.

No event like this would be complete without a good feed. And I am here to tell you that Jenny and Evelyn kept us fed and full all day! We will all look forward to this again!

Below is myself (VK2IPO) with one of the Scouts talking on my Yaesu 890 Hf Rig.
Cheers de VK2IPO.



■ Larry Conner of the Oxley Regional Amateur Radio Club with First Port Macquarie Club Cameron Rolo.

SOLAR INDICES EXPLAINED

Solar Flux:

Radio flux is the amount of solar noise that is emitted by the sun.

The solar flux is used as a basic indicator of solar activity. It can

vary from values of about 65 to values in excess of 300.

High solar flux values generally provide good ionization for long distance communications at higher than normal frequencies.

Sunspot Number:

It represents the number of observed sunspots and sunspot groups on

the solar surface. Sunspot numbers can vary between zero, for sunspot minimum periods, to values in excess of 350 or 400 (in the very active

"solar max" period of the sun's 11 year cycle).

The geomagnetic A-index:

Represents the severity of magnetic fluctuations.

0-10=quiet

11-20=unsettled

21-50=sub-storm

High levels of geomagnetic activity, say higher than 25

are associated with poor HF band conditions.

Boulder K Indices:

The geomagnetic K index is related to the A index.

Each UT day is divided into 8 three-hour intervals, starting at 0000

UT. The K Index ranges from 0 to 9. The K index is useful in determining the state of the geomagnetic field, the quality of radio signal propagation and the condition of the ionosphere. Generally, K index values of 0 to 1 represent quiet

magnetic conditions and imply good radio signal propagation

conditions. Values between 2 and 4 represent Unsettled to Active

magnetic conditions and generally correspond to less-impressive radio

propagation conditions. K-index values of 5 represent minor storm conditions and are usually associated with Fair to Poor propagation on many HF paths. K-index values of 6 generally repre-

sent major storm conditions and are almost always associated with poor radio propagation conditions. K-index values of 7 represent Severe storm conditions and are often accompanied by "radio blackout"

conditions (particularly over higher latitudes). K indices

of 8 or 9

represent

Very severe

storm condi-

tions and

are rarely

encountered

except dur-

ing excep-

tional peri-



Slip-Slop-Slap guys.

ods of solar activity). K-indices of this high value most often produce radio blackouts for periods lasting in excess of 6 to 10 hours (depending of the intensity of the event).

"From our resident meteorologist **VK4ARB**"

EDITOR'S CORNER

I appreciate the opportunity to be able to publish the Oxley Region Amateur Radio Club's Newsletter. I will do my best to publish interesting material for your reading enjoyment. I would like to formally invite you all to have a visit at my home

page on the Internet located at <http://members.xoom.com/Okieboy>. After you wander around you will see on the second page there is a download section. Download the plug in called Surf and Call there. Close your browser and install

that plug in. Then go back to my page and go to the video conference page. You can get there from my 2nd page by clicking where it says go to my conference page. From there just click on Call of the room you want to join!

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

1	F	JOHN ((FLORENCE)	BAILEY	VK2KHB	PORT MACQUARIE	02 6582.2192
2	F	JOHN ((MARY))	BAYLIS	VK2JB	LAKE CATHIE	
3	F	COLIN ((JAN))	BELLENGER	VK2AF	PORT MACQUARIE	02 6582.3803
4	F	BOB	BRODIE	VK2EJK	PORT MACQUARIE	02 6582.0592
5	F	ROY W ((JUNE))	BURGES	VK2YOR	PORT MACQUARIE	02 6583.9349
6	F	BRUCE	CLARK	VK2MAZ	PORT MACQUARIE	02 6583.5245
7	F	LARRY ((SHIRLEY))	CONNER	VK2IPO	PORT MACQUARIE	02 6583.6924
8	F	KEVIN ((JUNE))	COULTER	VK2MAM	PORT MACQUARIE	02 6583.8325
9	F	IAN	DALRYMPLE	VK2XU	PORT MACQUARIE	02 6584.9922
10	F	TRACY ((CINDY))	DIGNUM	VK2GTM	HERONS CREEK	02 65 85.7061
11	F	CHARLES ((PAT))	EDMONDSON	VK2FSH	PORT MACQUARIE	02 6584.0495
12	D	STAN ((BETTY))	ELLIS	VK2DDL	TUNCURRY	02 6554.7996
13	F	BADEN ((VALERY))	GLEESON	VK2MOQ	PORT MACQUARIE	02 6582.2018
14	F	KENNETH ((-))	GWINNELL		PORT MACQUARIE	02 6584.2860
15	L	KEITH	HANLON		PORT MACQUARIE	-
16	L	PETER	HILL	VK2BZA	LAKE CATHIE	02 6585.5349
17	F	SNOW	HODDER	VK2DV	PORT MACQUARIE	02 6583.7095
18	F	WILL ((CAROL))	JAMIESON	VK2XXU	DUNBOGAN	02 6559.8622
19	F	JOHN ((THEA))	JONES	VK2JJ	LAKE CATHIE	02 6585.4522
20	F	DON	JONES		PORT MACQUARIE	02 6582.5084
21	D	BRIAN	KELLY	VK2WBK	TAMWORTH	02 6776.2004
22	F	GARRY ((LINDA))	LAWER		PORT MACQUARIE	02 6582.0597
23	F	JACK	LEEDS	VK2KN	PORT MACQUARIE	02 6582.5991
24	L	LARRY	LINDSAY	VK2CLL	WAUCHOPE	02 6587.1155
25	L	HENRY	LUNDELL	VK2ZHE	PORT MACQUARIE	-
26	F	KEITH ((GWEN))	LUTTON	VK2KDL	TELEGRAPH POINT	02 6585.0321
27	F	ALLAN ((DAWN))	MADIGAN	VK2MAI	WAUCHOPE	02 6585.2043
28	F	JASON	MARIS	VK2FT	TELEGRAPH POINT	02 6585.0426
29	F	JIM	MCINTYRE	VK2CJM	PORT MACQUARIE	02 6583.5696
30	F	JOHN	MCLEAN	VK2KCE	PORT MACQUARIE	02 6583.7400
31	F	TERRY	MEEHAN	VK2KL	PORT MACQUARIE	02 6584.2997
32	L	ARTHUR ((WENDY))	MONCK	VK2ATM	PORT MACQUARIE	02 6583.1311
33	F	LAURIE ((ROBIN))	NEWHAM	VK2ELN	PORT MACQUARIE	02 6583.5387
34	F	ALAN	NUTT	VK2GD	PORT MACQUARIE	02 6582.3557
35	F	DAVID A ((DEE))	PILLEY	VK2AYD	KING CREEK	02 6585.2647
36	F	BILL	ROTH	VK2CWR	PORT MACQUARIE	02 6581.1776
37	F	NEIL ((VERENA))	SANDFORD	VK2EI	PORT MACQUARIE	02 6582.5830
38	F	BILL ((RUTH))	SINCLAIR	VK2ZCV	PORT MACQUARIE	02 6583.9302
39	F	DAVID ((ROMA))	SMITH	VK2DAL	WAUCHOPE	02 6585.1004
40	D	DARYL	ST. JOHN	VK2MZ	FORSTER	
41	F	DAVID ((AILEEN))	TARRANT	VK2HBC	SPRINGFIELD	02 4365.5046
42	F	TREVOR ((PHYLLIS))	THATCHER	VK2TT	WAUCHOPE	02 6585.2278
43	F	NEIL ((WENDY))	TROTTER	VK2NNT	PORT MACQUARIE	02 6584.1940
44	F	BRUCE ((GWEN))	WALKER	VK2HOT	PORT MACQUARIE	02 6583.8360
45	F	JIM	WEBSTER	VK2BZD	PORT MACQUARIE	-

F = Full Member

D = Distant Member

L = Life Member

We're on the Web
[Http://www.orarc.tsn.cc](http://www.orarc.tsn.cc)