

NEWSLETTER

May - June
2000

Oxley Region Amateur Radio Club Inc.
P.O. Box 712
Port Macquarie 2444

Pres: Charles Edmondson



Field Day 2000

YEAR 2000 FIELD DAY CO- ORDINATOR'S REPORT

The year 2000 Field Day has come and gone but considering the wet and cold conditions we experienced over the weekend I think it was quite a successful event. Because of the wintery blasts attendance figures were down by a little over 30 percent on previous years. Weather-wise it was just bad luck, but from a solidarity point of view I think you all can be proud of yourselves. I don't

like naming individuals on these occasions, because I know



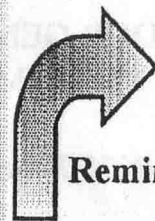
you all pitch-in and help somewhere or other, but I do think I should mention the three "Fox-tails", Bill, Larry and Henry for their efforts. Registration chief - Dave Pilley and Keith his able assistant. Master of

Ceremonies, Arthur Monck, a real sterling effort. V/P Bruce Walker was a jack-of-all-trades. John Jones, Trevor Thatcher, John Bailey and their female sloggers - Phyllis, Linda and Dawn. Last of all Secretary Alan Nutt and Treasurer Roy Burges. I know I will have forgotten somebody - I usually do - but would everybody who assisted please accept my genuine thanks.

I have a few recommendations for next year -

ORARC

**ORARC 2 Metre
net meets
Wednesday eves
at 7:30 P.M. and
also on Sunday
mornings at 8 on
the Telegraph
Point repeater.**



Reminder!!!

**ORARC meets
every 1st
Saturday of each
month. They are
held at the SES
Bldg. At 1 P.M.**

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(I've already had a long-range forecast from Lennox Walker and it is for fine weather) - but we will hear about them later on.

Yours sincerely,
Allan (VK2OA)
(Allan Madigan)

MAJOR RAFFLE OPEN ORDER \$100 BIG W
1st VK2JJ John Jones
2nd TWIN PACK
CASSEGRAIN WINE
VK2KCE John McLean
3rd OPEN ORDER BIG W \$25
VK2ZCSV Bill Sinclair

LUCKY DOOR LADY PRIZE - Patricia Martin
(Picture Bag Pack Cosmetics)

LUCKY DOOR GENTS PRIZE - (a VK2ATM Package)
(Winner - VK2GJ) no name.

OTHER LUCKY NUMBER PRIZES
Westport Bowling Club
Dinner for 2 - Bob

Brodie

2 - John McLean
Dick Smith \$25 voucher
Helen (XYL VK2YMW)
ICOM T SHIRT -
Larry Lindsay
ICOM MUG AND
CAP - (David Pilley -
donated back) ICOM
PACK - VK2DAL
ICOM PACK VK4UPR
5 SPOONS -
VK2DV Snow
CLOCK - Baden
Gleeson 2QRZ Discs -
VK2KDE
Sincere thanks to Arthur
and Wendy for their
large collection of
goodies for door prizes.
Also Dick Smith (Ken
Welch); Westport
Bowling Club. ICOM.
John Jones and Trevor
Thatcher.

RESULTS OF YEAR-
2000 FIELD DAY
EVENTS AND
RAFFLES

FOX HUNTS

2 - Metre Talk-IN
1st VK2WY (Tony)
2nd VK2ZTM (Tim)
3rd VK2BZC (Paul)

40 Metre 1 Transmitter
1st VK2WY (Tony)
(only 2 entrants 2nd
did not complete).

2-Metre 2 Transmitters.
1st VK2WY (Tony)
VK2DGT (Ken)
2nd ----- VK2YM2
(Chris)

3rd -----

10-Metre 1 Transmitter.
1st VK2DGT (Ken)
2nd VK2WY (Tony)
3rd VK2MAZ (Bruce)

2-Metre Pedestrian.

1st VK2YMW (Chris)
2nd VK2DGT (Ken)
3rd VK2WY (Tony)

FOX HUNT
CHAMPION : VK2WY
Tony - 27 points

FOX HUNT RUNNER-
UP : VK2DGT (Ken) -
16 points

CHAMPION
AMATEUR RADIO
VEHICLE : (VK2AJ)
Rod



What is DPI?

It officially stands for **Dots Per Inch**. There are a few of us who still know what an inch is. For those who don't, it is 25.4 mm. So it should be DP25.4MM. Now everything produced by a computer is made up of dots, even this text you are reading. The big dot above is also made up of little dots; approximately 67,000 of them. To produce one single dot at 1/300 of an inch is possible. It would also be nearly impossible to see.

If we take the following items:

A 6" x 4" photo (that's right they are still cut to inch sizes), a 17" computer monitor set up in 800 x 600 pixels mode and a scanner. Now, say we want the photo

image to fill the screen as close as possible. We have a physical screen display width of 12.5 inches. This means our screen has $(800/12.5)$ 64 pixels per inch.

We need to convert a 6 inch wide photo to 12.5 inches. Scan in one dot to match one pixel, so with 800 pixels for 6 inches $(800/6)$ equals 133.33 DPI.

To fill the screen both ways you have to crop the picture width because 800 x 600 and 6" x 4" are not equal ratios. The best screen fill you will get, is to use the following measurements:

To use 796 pixels wide and 589 pixels high, crop photo size to 5.307" by 3.927" or 13.48 cm x 9.97 cm.

Scan it in at 150 Dots per inch. Now pixels and dots per inch take a bit of understanding. But most people think the more DPI they use and have got use of, the better the results. Only within limitations, scanning more than 150 DPI in the above sample will achieve nothing. Scanning more DPI than your printer can print will also achieve nothing. People who have a DPI problem and must have the equipment that will scan at 9600 DPI and greater have a real DPI problem in which DPI stands for something else.

If you can get your printer to print one black dot at 300 DPI and

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actually see it you are doing well. It is impossible to see a dot with the naked eye at 1440 DPI on a piece of paper.

The lower DPI you can scan at and have good results the better. This also keeps file sizes smaller and make them easier to use and access.



ARTEMIS Reaches for the Moon!

Every few months, the conversation at the Reeves' house goes something like this: "Dear, I'm going to spend this weekend participating in the XYZ contest on 20 Meters-- Just slide a baloney sandwich under the door every few hours." To my wife, this is a call to arms. "It's almost the 21st Century, honey, she says, Ham Radio went out in the Fifties. If you want to talk to your friends across the country, just get on the Internet!" As much as I hate to admit it, she has a valid point. Technology has advanced so much that you only need a personal computer and

a phone line to connect to the world effortlessly and more importantly, without studying for a ham license. Could we be witnessing the death of HAM RADIO? We all know that fads come and go. I always believed that the last big technology fad, CB radio of the 70's, didn't threaten ham radio - quite the contrary- I thought that it would be a perfectly natural step for the upgrade to ham radio. But I'm not so sure about the Internet craze. She's one big dragon to slay. Ham Radio used to be promoted heavily in our schools but it has been replaced by the computer. Packet technology that was pioneered by hams has fueled the growth of the Internet, so it's both

ironic and sad that it has eclipsed amateur radio to the point of extinction. Let's face it, ham radio has lost the glamor it once had. I'm not a prophet of doom by any means but we must be realistic. The amateur population is shrinking. The percentage of new license applications is down in the double digits while, I'm sorry to admit, the average age of operators is somewhere between 40 and dead. Kind of bleak, isn't it? Obviously, we need to attract newcomers. We need to turn the current trend around. We need exposure in the media, the classroom, and anywhere else we can get it. I believe that our future-our very existence-

depends on the growth of ham radio. If we want to continue to be viable and hold on to our frequencies, we need to do a better job of recruiting. But what can we offer the people that they can't get from the Internet?

How about another satellite? I see your eyes glazing over.

Say the word "Satellite"

nowadays and the general population yawns and points to their DSS receiver. "Been there, done that," they say.

Another OSCAR can't attract the attention of newcomers, I agree. Not a typical OSCAR, flying past the globe at thousands of miles per hour, repeating radio signals so briefly that the typical "pass" lasts a mere ten minutes. But what about an OSCAR that was sitting on lunar soil, right smack in the middle of the Moon's equator? Too expensive? Too difficult to achieve? Maybe in 1970 it was unthinkable; but 30 years later we should look into a amateur-sponsored lunar mission..

Think of how much Press the amateur community could reap by embarking on such a project. People would be standing in line fifty deep to get their ham tickets! Besides the much needed attention, a Moon-based transponder would be very useful. As I

said before, only a Moon-based system would give hams the ability to work the world on UHF without waiting for that brief moment when a satellite to passes over. The-Moon is a pretty big target to hit, even if it is a quarter million miles away. The Moon is also visible to any one side of the Earth for hours at a time. Rag Chewing 21st Century style!

EME (Moonbounce) accomplishes this, but look at the path losses! I'm not an expert on all the technical aspects involved in such an endeavor (Im no rocket scientist); nor do I have any idea of the cost involved, but I think I can reduce my plan into words here and let the engineers take it from there. I have given my idea the working name "ARTEMIS", for AMATEUR RADIO TRANSPONDER MOON SYSTEM. As a side note, you will remember that Artemis was the Greek God of the Moon. The ARTEMIS craft I envision would be very simi-

lar to the Surveyor robots that soft-landed on the Moon in the mid 60's. NASA launched seven Surveyors to test the feasibility of the subsequent manned Apollo flights. The 600-pound Surveyors had a solid design. In fact, of the seven that flew, five were complete successes. They sent back photographs and sifted through the Lunar soil. The Surveyors were only designed to operate for a few weeks, however, using 90-watt solar cells and batteries rated at 200 amp-hours. Most made it through the Lunar night's darkness, which lasts about 14 earth days, but failed soon thereafter.

Of course, for a permanent mission like ARTEMIS, the craft must be able to not only survive the -200 degree below zero temperatures at night, but the +250 degrees in direct sunlight and do this over and over. Three solar panel "wings" mount on the side of the main platform and would be locked into place after insertion into Earth orbit. They would double as stabilizers upon the craft's

lunar landing, keeping ARTeMiS from tipping over on impact. The Solar panels would charge the internal batteries that provide voltage to the radio gear. It would probably be too much of a drain on the power supplies to expect it to transceive during the lunar nights but that should not be too much of a handicap. When the Moon is painted in darkness, it is very difficult to see and hence difficult to spot. Sure, tracking software is readily available, but remember, the whole idea is to make this an experience for the beginners as well as old timers. A well-lit Moon would be an excellent indication that ARTeMiS should be on the air. We can depend on a two-week on, two-week off cycle; following the sunlight. How's that for your extended operating window? ARTeMiS is shaped like an equilateral triangle. Its three side panels are 60 inches wide by 12 inches tall and deep. At the seams of the panels are reinforced

struts. The body of the craft consists of three separate compartments, or bays. One bay each for guidance electronics, radio communication equipment, and command/telemetry devices. The rechargeable-battery cells are positioned throughout all three to distribute the crafts weight evenly. The three points where the sides meet have the crafts landing gear attached. Its legs are hollow aluminum tubing with small springs that act as shock absorbers on landing. The legs double as ducts for fuel lines to the small attitude engines in ARTeMiSs three landing pads. These thrusters pulse-fire briefly during the descent stage to keep ARTeMiS level with the Lunar horizon. Their operation is controlled by an internal gyro/servo unit. The main descent engine is throtttable and rigidly mounted within the main platform, but also isolated from the body of the craft by three shock absorbing braces. The propellant tanks for this engine are located directly above the engine. Control of it is accomplished by

the use of Doppler radar and velocity sensors. I envision the radio systems aboard ARTeMiS to be very similar to the OSCARS' equipment. All mode transponders for the retransmission of signals with perhaps a separate fast scan TV unit onboard to send back pictures of the surface. A beacon would not be necessary-it's not like ARTeMiS is going to suddenly vanish from the surface! A telemetry downlink channel would be used to send back temperature and other vital statistics. This could even be operated at reduced power when the craft is in darkness. Since ARTeMiS is a "Set it and forget it" vehicle, the only command uplink channels would be to shut down the transmitters in an emergency. No need to ever fire steering motors once its on the ground. This has to be done with an orbiting bird. As far as the power output goes, the transmitters will work fine in the ten watt range.... After all, Im a RP fanatic at heart. Ten watts is more than enough to make the short 250,000 mile trip!

Editor's Corner

G'day to all out there in "newsletter land". I want to remind everybody that this newsletter is your's, and everybody is encouraged to submit any articles that are newsworthy and for the betterment of this newsletter. Please email me at okie@mpx.com with any such articles for the Oxtales.

Also, I would like to encourage you blokes out there that have your TNC sitting on the table

collecting cobwebs, to fire them up on 144.875 and give our digi a go. There is a definite lack of



VK2IPO

ORARC is # 1

activity on the frequency lately. John, VK2VY has his BBS set up now there and also a link with

VK2TV in Kempsey. This will be a nice start for our north path on netrom up into QSLD. Our South path to Great Lakes is still not there. I am not sure whether that's the Cabbage digi, or our relocated antenna isn't making the hop down south. A connection to the internet is possible through vk2rpl-10 by connecting to BRISSY or CONV from his node also. See yas on the digi.

Classified Ads

For Sale:

TS-450S Kenwood in new Condition.
Kenwood MC-60 Desk microphone.
'85 ARRL Handbook.
(2) Home-Brew Iambic Keyers.
Power Supply used with TS-450
TV Antenna Amplifier
2-Way Antenna Switch
Emtron EAT-3002
Aerial Tuner.
Daiwa SWR/Power Meter. 1.8-150 Mhz.

Kenwood 2 Metre T241A Fm Xcvr.
Self standing 30' Antenna mast.
3 element beam with rotor and indicator
80 mtr wire antenna with ladder line.
Various test equipment and kits, clock radio. All inquiries please to Snow Hodder VK2DV.
Going Bush? Never get lost.
Garmin GPS 12

personal Navigator. \$200.

de VK2AYD

Want:

I am looking for a 2 Meter All-Mode Transceiver. Will also need a good 2 meter yagi for SSB and a 2 Meter SSB Power Amplifier for the station. Please contact Larry VK2IPO. Email okie@mpx.com.au or phone 2 65836 924.

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	D	ALAN	BELL	VK2BEL	WOOTTON	02 4997.7293
4	F	COLIN ((JAN))	BELLENGER	VK2AF	PORT MACQUARIE	02 6582.3803
5	F	BOB	BRODIE	VK2EJK	PORT MACQUARIE	02 6582.0592
6	F	ROY W ((JUNE))	BURGES	VK2YOR	PORT MACQUARIE	02 6583.9349
7	F	BRUCE	CLARK	VK2MAZ	PORT MACQUARIE	02 6583.5245
8	F	LARRY ((SHIRLEY))	CONNER	VK2IPO	PORT MACQUARIE	02 6583.6924
9	F	KEVIN ((JUNE))	COULTER	VK2MAM	PORT MACQUARIE	02 6583.8325
10	F	IAN	DALRYMPLE	VK2XU	PORT MACQUARIE	02 6584.9922
11	F	JIM	DANIELS		PORT MACQUARIE	02 6583.1933
12	F	TRACY ((CINDY))	DIGNUM	VK2GTM	HERONS CREEK	02 65 85.7061
13	F	CHARLES ((PAT))	EDMONDSON	VK2FSH	PORT MACQUARIE	02 6584.0495
14	D	STAN ((BETTY))	ELLIS	VK2DDL	TUNCURRY	02 6554.7996
15	F	BADEN ((VALERY))	GLEESON	VK2MOQ	PORT MACQUARIE	02 6582.2018
16	F	LEWIS	GREEN	VK2AG	PORT MACQUARIE	02 6584.9162
17	F	KENNETH ((-))	GWINNELL		PORT MACQUARIE	02 6584.2860
18	L	KEITH	HANLON -		PORT MACQUARIE	-
19	L	PETER	HILL	VK2BZA	LAKE CATHIE	02 6585.5349
20	F	SNOW	HODDER	VK2DV	PORT MACQUARIE	02 6583.7095
21	F	WILL ((CAROL))	JAMIESON	VK2XXU	DUNBOGAN	02 6559.8622
22	F	JOHN ((THEA))	JONES	VK2JJ	LAKE CATHIE	02 6585.4522
23	F	DON	JONES		PORT MACQUARIE	02 6582.5084
24	D	BRIAN	KELLY	VK2WBK	TAMWORTH	02 6776.2004
25	F	GARRY ((LINDA))	LAWER -		PORT MACQUARIE	02 6582.0597
26	F	JACK	LEEDS	VK2KN	PORT MACQUARIE	02 6582.5991
27	L	LARRY	LINDSAY	VK2CLL	WAUCHOPE	02 6587.1155
28	L	HENRY	LUNDELL	VK2ZHE	PORT MACQUARIE	-
29	F	KEITH ((GWEN))	LUTTON	VK2KDL	TELEGRAPH POINT	02 6585.0321
30	F	ALLAN ((DAWN))	MADIGAN	VK2OA	WAUCHOPE	02 6585.2043
31	F	JASON	MARIS	VK2FT	TELEGRAPH POINT	02 6585.0426
32	F	JIM	MCINTYRE	VK2CJM	PORT MACQUARIE	02 6583.5696
33	F	JOHN	MCLEAN	VK2KCE	PORT MACQUARIE	02 6583.7400
34	F	TERRY	MEEHAN	VK2KL	PORT MACQUARIE	02 6584.2997
35	L	ARTHUR ((WENDY))	MONCK	VK2ATM	PORT MACQUARIE	02 6583.1311
36	F	RAY	MULLINS	VK2WRM	PORT MACQUARIE	02 6581.0685
37	F	LAURIE ((ROBIN))	NEWHAM	VK2ELN	PORT MACQUARIE	02 6583.5387
38	F	ALAN	NUTT	VK2GD	PORT MACQUARIE	02 6582.3557
39	F	DAVID A ((DEE))	PILLEY	VK2AYD	KING CREEK	02 6585.2647
40	F	BILL	ROTH	VK2CWR	PORT MACQUARIE	02 6581.1776
41	F	NEIL ((VERENA))	SANDFORD	VK2EI	PORT MACQUARIE	02 6582.5830
42	F	BILL ((RUTH))	SINCLAIR	VK2ZCV	PORT MACQUARIE	02 6583.9302
43	F	DAVID ((ROMA))	SMITH	VK2DAL	WAUCHOPE	02 6585.1004
44	D	DARYL	ST. JOHN	VK2MZ	FORSTER	
45	F	DAVID ((AILEEN))	TARRANT	VK2HBC	SARATOGA	02 4369.8738
46	F	TREVOR ((PHYLLIS))	THATCHER	VK2TT	WAUCHOPE	02 6585.2278
47	F	NEIL ((WENDY))	TROTTER	VK2NNT	PORT MACQUARIE	02 6584.1940
48	F	BRUCE ((GWEN))	WALKER	VK2HOT	PORT MACQUARIE	02 6583.8360
49	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)