

AUSTRALIA 45c



# BULLETIN APRIL 1996



THE WEST AUST VHF GROUP INC.  
P.O. BOX 189 APPLECROSS, 6163

PATRON Mr F. W. DAWSON

PRESIDENT	TERRY	VK6ZLT	SECRETARY	BOB	VK6ZFY
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ACTIVITIES	TERRY	VK6ZLT	MUSEUM REP	TOM	VK6ZAF

APR	22	COMMITTEE MEETING
	27	FOXHUNT
	29	GENERAL MEETING
JUNE	17	COMMITTEE MEETING
	22	FOXHUNT
	24	GENERAL MEETING

MAY	20	COMMITTEE MEETING
	25	FOXHUNT
	27	GENERAL MEETING
JUL	22	COMMITTEE MEETING
	27	FOXHUNT
	29	GENERAL MEETING

WESTERN AUSTRALIAN VHF GROUP NEWSLETTER P.O. BOX 189, APPLECROSS W.A. 6153.

Circulation is 66. I would to remind members that some of you may have accidently overlooked paying your fees. Please forward \$20 to Ces VK6AO thank you. This consists of 36 city and 9 country fee paying members, 15 life members some of whom have donated \$10 to the club for the bulletin costs and 6 courtesy copies of the bulletin.

<sup>6th</sup>  
SECOND WA VHF/UHF/SHF FIELD DAY APRIL 1996 <sup>7</sup>  
CONTEST RULES

1. The contest is open to all individual licensed amateurs.
2. All bands above 50 MHz, and all licensed modes, may be used.
3. Points are scored for two way contacts between pairs of stations, at least one of which must be portable, and at least one of which must be in the VK6 call area. (Crossband and repeater contacts do not count towards the score, but may be used for liaison purposes.)
4. For the purposes of the contest, a portable station is one which is being operated away from the usual station address and which is not powered from the AC mains. Mobile stations (including permanently mobile) count as portable.

5. CONTEST DATE: Sunday <sup>6</sup>~~28th~~ April, 1996 <sup>7</sup>

6. CONTEST TIME: 1030-1630 WST (0230Z-0830Z)

The contest is divided into 3 intervals of 2 hours each. Two stations may work each other for a first scoring contact once on each band in each 2 hour interval.

7. ALTERNATE MODE: A second (and final) scoring contact on the same band may be made within each two hour interval, PROVIDED THAT EACH STATION USES A TRANSMISSION MODE DIFFERENT FROM THE ONE IT USED FOR THE FIRST CONTACT. Crossmode operation is permitted. E.g., stations A and B might have a 2 way FM phone contact, followed by a contact with A transmitting SSB phone, and B transmitting ATV. (LSB and USB phone are regarded as one mode. Similarly FM and phase modulation are regarded as the same. But FM phone and FM packet are different.) Below 450 MHz, operation on wideband modes such as FM must NOT take place on or near the SSB/CW calling frequencies. ~~A DISTANCE MULTIPLIER OF 1 APPLIES TO ALL ALTERNATE MODE CONTACTS.~~

8. Each scoring contact is worth 1 point times the following multipliers:

9. DISTANCE MULTIPLIER:

<sup>each</sup>  
For the ~~FIRST~~ scoring contact ~~on each band in each 2 hour interval:~~

Distance less than

km	25	50	75	100	125	150	175	200	225	250	275	300	300+
X	1	2	3	4	5	6	7	8	9	10	11	12	13

→

For the ~~SECOND~~ (alternate mode) scoring contact in a 2 hour interval:

~~X 1 (regardless of distance)~~

10. BAND MULTIPLIER:

Nominal frequency MHz

Band	50	144	432	1296	2400	3456	5760	10368	24000+
Multiplier	<del>3</del> 2	2	2	5	8	8	8	8	10

→

UNLIKE LAST YEAR, DISTANCE MULTIPLIERS DO APPLY TO

11. PORTABLE TO PORTABLE MULTIPLIER: 2  
 PORTABLE TO COUNTRY FIXED STATION MULTIPLIER: 2  
 (i.e. contacts count double if both stations are portable, or if one is portable and the other is a country fixed station.) A country station is one which is at least 100km from GPO Perth.
12. The contest exchange will consist of a signal report, 3 digit serial number starting from 001, and the station location.
13. SECTIONS: 1. Portable (All band) 3. Fixed  
 2. Portable (Single Band) 4. Novice

ALL PORTABLE contestants should submit with their logs, a tally of their score for each band (for section 2) AND their total score (for section 1). It is anticipated that in the single band portable section, certificates will be awarded for the highest portable score on each band, and for the overall Highest single band score by an entrant other than the winner of section 1. The Novice section will be won by the novice licensee who achieves the highest score among entrants to sections 1 and 3. One contestant who has not won any other award, will be chosen randomly to receive the Participation Certificate.

14. GROUP OPERATION: There is no section for club stations, but contacts with club stations count towards the scores of individual amateurs entering sections 1 - 4. Groups of up to 3 licensed amateurs may pool their equipment, and operate from a single portable site under their own individual call signs. The use of multiple call signs by a single individual is not allowed.

15. LOGS should be sent by ~~27 MAY~~ <sup>28 APRIL 7 April</sup>, 1996 (May Meeting night) to:  
 CONTEST MANAGER, WEST AUSTRALIAN VHF GROUP (INC),  
 PO BOX 189 APPLECROSS, W.A. 6163

The Contest Manager's decisions and interpretation of the rules are final. Each log should be accompanied by a declaration signed by the contestant stating "I HAVE OPERATED IN ACCORDANCE WITH THE RULES AND SPIRIT OF THE CONTEST, AND THE SMA REGULATIONS."

DISTANCE OF LESS THAN (km)

BAND	25	50	75	100	125	150	175	200	225	250	275	300	300+
50/144 MHz	3	0	0	12	5	18	21	24	27	30	33	36	39
432 MHz	2	4	6	8	10	12	14	16	18	20	22	24	26
1296 MHz	5	10	15	20	25	30	35	40	45	50	55	60	65
2.4 - 10 GHz	8	16	24	32	40	48	56	64	72	80	88	96	104
24 GHz & up	10	20	30	40	50	60	70	80	90	100	110	120	130

Use the first column for ALL alternate mode contacts. Contacts between a portable station and a portable or country fixed station, count double.

SAMPLE CONTEST LOG ENTRIES:

Time	Band	Mode(TX/RX)	Station	Sent	Rec'd	Location	Dist	Mult.
1031	145	FM	VK6BMD/p	57001	54067	Mt. Misery		7
1032	144	SSB/CW	VK6BMD/p	599002	56068	"		7
1034	1296	SSB	VK6ZLT	59003	58101	Bull Creek		2
1036	144	packet	VK6ZFY/p	59004	59507	6km W of Gingin		4

For each band, add up all the numbers in the distance multiplier column for contacts with portable stations. If you were portable, add to this the column entries for country fixed stations, multiply by 2, and then add in the numbers for the other fixed stations. (If you were not portable omit this second step.) Multiply by the band multiplier to get the total band score. It's also OK to use separate sheets for each band in your contest entry.

If things get a bit quiet, some suggested frequencies to try are:

SSB 50.150	144.125	432.125	1296.1
FM 52.2	146.5	434.0	439.0
50.25			

## BEACON COMMITTEE

The new South West Site 50 MHz and 144 MHz license has been issued. The radios, antennas, power supplies are finished and built. The site has been selected and it has a mast and power available.

The Busselton beacon tower has been repaired by the yacht club.

## AO-13 ATTITUDE SCHEDULES 1996

As you all must be aware the death of AO-13 is imminent and therefore if you want to be able to tell your grandchildren that YOU WORKED OSCAR 13 ( WOW GRANDDAD ) then you only have a short time to do so. It favours the southern hemisphere now and Arnold VK6VV has recently made the first Australia to Argentina mode S contact. More and more countries are out there on AO-13 it is very easy to use so please try it over the next 11 weeks from 1 April to 17 June you will love it. I worked 12 countries in one night on mode B and I have 24 countries on mode S. Arnold VK6VV has 30 countries on mode S.

The planned attitude schedule for Oscar 13 during 1996 is:

Date [Mon]	Alon/Alat	Weeks
1996 Apr 01	180/0	11
1996 Jun 17	220/0	11
1996 Sep 02	180/0	13 ??
1996 Dec 02	200/0	2 ??

Re-entry is expected around 1996 Dec 05-19, so that by mid November the spacecraft may well have expired due to overheating, or be non-maneuvrable due to buffeting at perigee (under 100 km).

This will be an interesting time, and the command team welcomes suggestions which we could implement to make use of this unique opportunity to observe an amateur spacecraft at re-entry. None has been received thus far.

### Mode Schedule

M QST \*\* AO-13 TRANSPONDER SCHEDULE \*\* 1996 Apr 01 - 1996 Jun 17  
Mode-B : MA 0 to MA 70 |  
Mode-BS : MA 70 to MA 120 |  
Mode-S : MA 120 to MA 122 | < - S beacon only  
Mode-S : MA 122 to MA 140 | < - S transponder; B trsp. is OFF  
Mode-BS : MA 140 to MA 180 | Alon/Alat 180/0  
Mode-B : MA 180 to MA 256 | Move to attitude 220/0, Jun 17  
Omnis : MA 230 to MA 25 |

Please note that the higher powered engineering beacon 145.985 MHz is ON for two periods: MA 0 - 25 and MA 90-100.

### Provisional Schedule

N QST \*\*\* AO-13 TRANSPONDER SCHEDULE \*\*\* 1996 Jun 17 - Sep 02  
Mode-B : MA 0 to MA 140 | \*\*\* P R O V I S I O N A L  
Mode-BS : MA 140 to MA 240 |  
Mode-B : MA 240 to MA 256 | Alon/Alat 220/0  
Omnis : MA 250 to MA 140 | Move to attitude 180/0, Sep 02

<ftp://ftp.amsat.org/amsat/articles/g3ruh/a114.zip> (Article)

<ftp://ftp.amsat.org/amsat/satinfo/ao13/decaykep.zip> (Re-entry keps)

James Miller G3RUH @ GB7DDX.#22.GBR.EU 1996 Mar 24 [Sun] 1039 utc