

Summits on the Air (SOTA)

VK3HRA

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BARG – 31st August 2012



Agenda

- History
- Summits
- Chasers
- Activators
- Activations
- Hardware
- Awards
- Resources



Summits on the Air (SOTA)

- SOTA is an award scheme for radio amateurs and shortwave listeners that encourages portable operation in mountainous areas.
- SOTA has been carefully designed to make participation possible for everyone.
- Each summit earns the activators and chasers a score which is related to the height of the summit.



SOTA History

- Original idea of John Linford, G3WGV
- European Adventure Radio by Richard G3CWI
- Launched 2nd March 2002. England and Wales

- VK3 Launched 1st February 2012
 - 609 summits across 8 regions
 - Central region

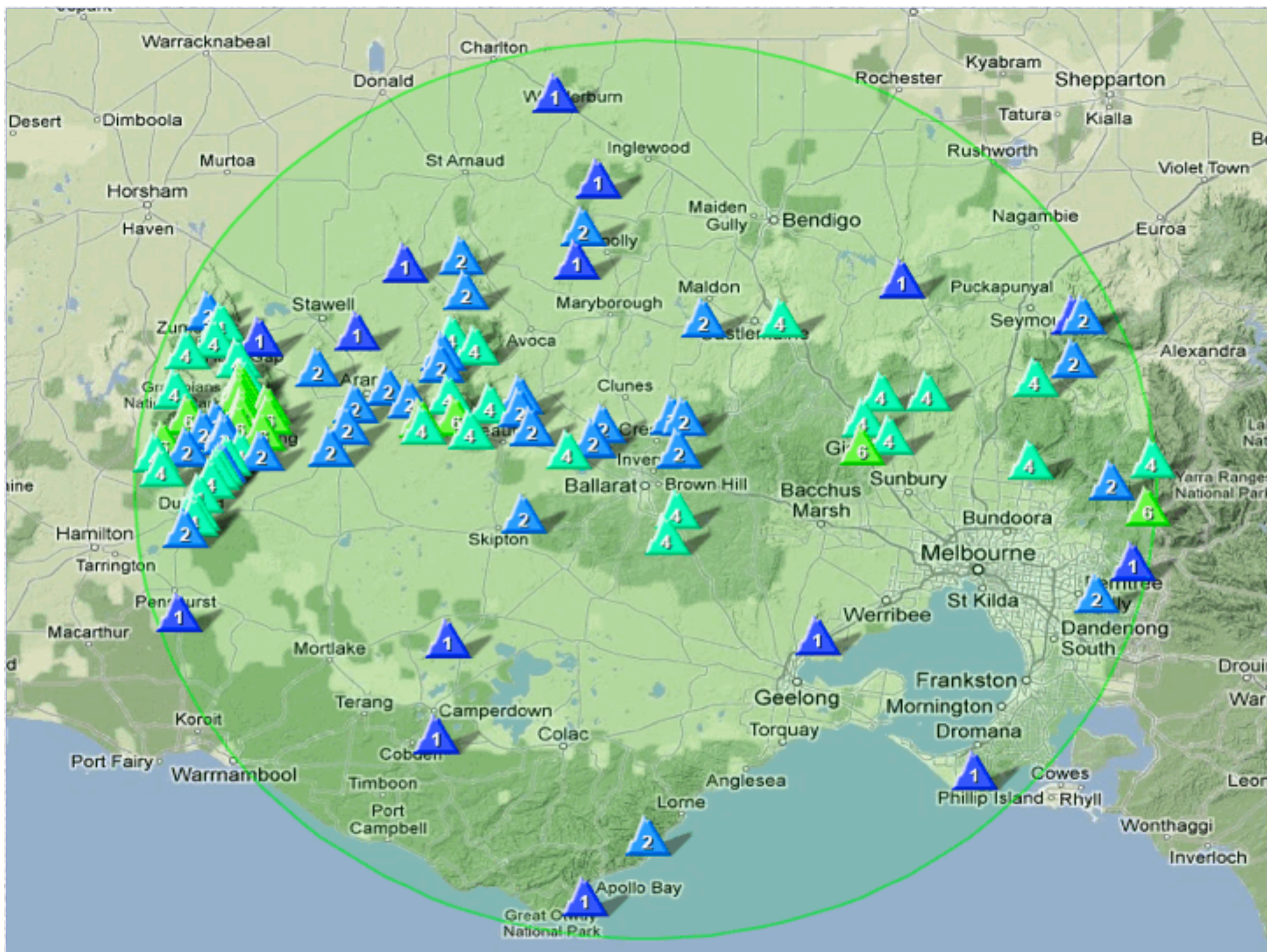
- VK1, VK2 and VK5 developing

SOTA Summits

- Based on Fire Zone,
 - Central – VC
 - Mallee – VL
 - North Country – VU
 - North East – VE
 - South West – VS
 - Wimmera – VW
 - East Gippsland - VG
 - North Central – VN
 - West/South Gippsland – VT
- Full list of current summits and planning tools on SOTA Mapping Project and site
 - <http://www.sotawatch.org/summits.php?assoc=66>
 - <http://sotamaps.wsstvc.org/range.php>
- XML files available for viewing on Google Maps.
- Updated regularly

SOTA Summits - cont

- Points based on height,
 - Band 1, score 1 point < 500 m
 - Band 2, score 2 points ≥ 500 m < 700 m
 - Band 3, score 4 points ≥ 700 m < 900 m
 - Band 4, score 6 points ≥ 900 m. < 1200 m
 - Band 5, score 8 points ≥ 1200 m < 1500 m
 - Band 6, score 10 points ≥ 1500 m
- Bonus points are based on elevation
 - Summits 8 points and higher gaining the bonus.
 - 15 June to 14 October inclusive



SOTA Chasers



- Chasers can operate from home, a local hilltop or are even Activators on other summits
- Can chase each summit once per UTC day
- Can use any legal station configuration

VK3 Chasers

Position	Chaser Callsign	Activators Worked	Points	Avg. points per Expedition	View Log
1	VK3PF	33	166	5.03	View
2	VK3HRA	26	128	4.92	View
3	VK3ZPF	22	106	4.82	View
4	VK5PAS	16	84	5.25	View
5	VK3AFW	17	74	4.35	View
6	VK3TCX	11	63	5.73	View
7	VK3YY	10	52	5.20	View
8	VK3AZZ	11	36	3.27	View
9	VK2UH	6	28	4.67	View
10	VK3XBC	8	27	3.38	View
11	VK3WAM	9	25	2.78	View
12	VK5FKAD	2	12	6.00	View
13	VK1FSTJ	1	8	8.00	View
=13	VK1DI	1	8	8.00	View
15	VK3JMC	1	6	6.00	View
=15	VK3KR	1	6	6.00	View
17	VK2BO	1	4	4.00	View
18	VK3TPH	2	2	1.00	View
=18	VK3EVL	1	2	2.00	View

<http://www.sotadata.org.uk/default.aspx>

Chasers Tools - Alerts

Upcoming Activations

[new alert](#)

Sunday 12th August 2012

- 06:30 F5LKW/P on [F/AM-728](#) 10.122-cw,14.061-cw
+/- 30 min. APRS: F5LKW-7 ... 73 QRO (Posted by F5LKW)
- 07:00 EA7URS/P on [EA7/GR-001](#) 7.080-ssb,14.150-ssb
Time and freq. aprox. (Posted by EA7JHQ)
- 07:00 F5VGL/P on [F/JU-001](#) 14.062-cw,10.124-cw,7.032-cw,18.088-cw
cancel if bd wx, +-kHz, +-h, aprs F5VGL-7 21018cw (Posted by F5VGL)
- 08:00 F5LKW/P on [F/AM-291](#) 10.122-cw,14.061-cw
+/- 30 min. APRS: F5LKW-7 ... 73 QRO (Posted by F5LKW)
- 08:00 M0VWS on [DM/BW-348](#) 14.150-usb,7.150-lsb
My first summit activation !! hers to many more ! (Posted by M0VWS)
- 08:00 OM7SM on [OM/ZA-038](#) 145.500-fm,145.575-fm
Time + / - 30 min. With OM7AD, OM7KK (Posted by OM7SM)

<http://www.sotawatch.org/alerts.php>

Chasers Tools – Spots

Sat 01:20	VK3WAM on VK3/VC-001 Also on 7.1MHz (Posted by VK3YY)	146.500 fm
Sat 01:18	VK3WAM/P on VK3/VC-001 5/7 Wayne. A little bit of QSB this morning (Posted by VK5PAS)	7.100 ssb
Sat 01:11	VK3WAM/P on VK3/VC-001 3/1 TO 2/1 First chaser contact (Posted by VK1FSTJ)	7.100 ssb
Sat 00:49	VK3WAM/P on VK3/VC-001 57 to 59 (Posted by VK1DI)	7.100 ssb

<http://www.sotawatch.org/spots.php>

SOTA Activators



- SOTA activations occur on top of mountain tops
- Activators (those who ascend to the summits)
- Activations must use permitted amateur bands
- Motor vehicle use
 - Cannot be used for final access to summit
 - Cannot form part of station (e.g. batteries sitting in a car seat, shelter during operating, etc)

VK3 Activators

Position	Activator Callsign	Summits	Points	Seasonal Bonus	Total Score	Avg. points per Expedition	View Log
1	VK3WAM	34	191	21	212	6.24	View
2	VK3HRA	25	101	3	104	4.16	View
3	VK3XBC	3	30	0	30	10.00	View
4	VK3PF	9	17	0	17	1.89	View
5	VK3ZPF	6	16	0	16	2.67	View
6	VK3JSN	1	10	3	13	13.00	View
7	VK3AFW	2	10	0	10	5.00	View
8	VK3XL	1	4	0	4	4.00	View
9	VK3XJM	1	1	0	1	1.00	View
=9	VK3YY	1	1	0	1	1.00	View

<http://www.sotadata.org.uk/default.aspx>

Activations

Operation near the activation zone
summit top. (25 vertical meters)

Power by batteries, solar, human
power,

Activation points accumulate to
operator, not callsign



Planning & Patience

VK3YY Glenn Ready to go.

Hardware - Radio

- QRP Portable radios
 - FT817 most popular
- QRO Portable radio
 - Icom 7000
 - Yaesu FT-897
- VHF/UHF
 - Handy-talkie quickest method to activate where possible.



Hardware - Antenna

- Antenna
 - HF
 - Verticals
 - Dipoles
 - VHF / UHF
 - Ribbon 'J' Poles
 - VHF/UHF Beam



VK3WAM Vertical

Hardware - Antenna

- Support Trees
 - 'Squid' poles
 - Tripods
- Tuners
 - T1



VK3HRA Dipole

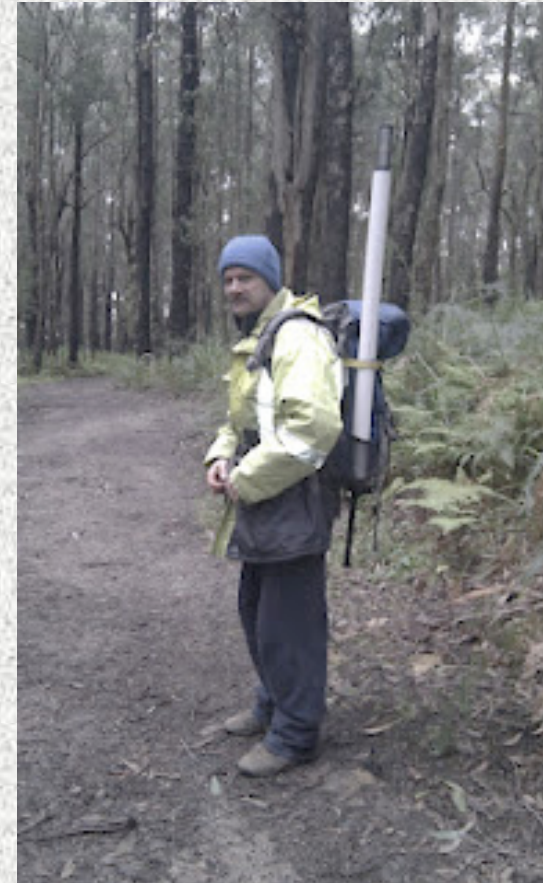
Hardware - Accessories

- Battery
 - High Capacity Internal
 - External
 - Lipo packs
 - SLAB
 - Watch set to UTC
 - Pencils
 - Log Book



Frequencies & Modes

- HF – SSB and CW
 - 3.615, 7.080 ,14.280, 21.280 & 28.480
- VHF – FM and SSB
 - 146.500 FM & 144.100 SSB
- UHF – FM and SSB
 - 439.00 MHz FM & 432.100 USB
- Modes in order of popularity,
 - SSB, CW and FM



VK3ZPF Peter

Hiking

- Hiking – Safety First
 - GPS and Compass
 - Maps
 - Water
 - Food
 - Torch
 - Knife
 - Clothing
 - First Aid



Spotting Tools

Wed 05:30 VK3HRA/P on [VK3/VW-003](#)

7.080 ssb

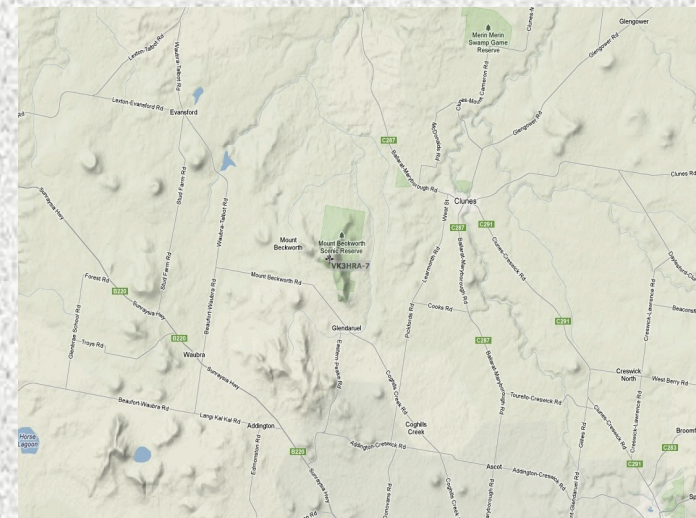
Allen 56, gave me 58. Allen in the fog. (Posted by VK3PF)

Wed 05:21 VK3HRA/P on [VK3/VW-003](#)

7.080 ssb

*Spot[VK3HRA]: cq cq (Posted by SMS)

- SMS via Mobile Phone
 - Good coverage
- APRS
 - Limited coverage



Awards

- We participate in SOTA for fun, but there are awards for Activators, Chasers and Short Wave Listeners
- 100, 200, 500, 1000, 2000, 5000 points



<http://www.sota-shop.co.uk/index.php>

Internet Resources

- **SOTA website** : <http://www.sota.org.uk/>
- **SOTA Database**:
<http://www.sotadata.org.uk/>
- **SOTAwatch**: <http://www.sotawatch.org/>
- **SOTA Reflector**:
<http://www.sotawatch.org/reflector.php>

Internet Resources

- www.adventureradio.de/data/
- SOTA Spots/Alerts
 - <http://www.intermoose.com/SMSBOT-usage.txt>
- Activation and chasing analysis tools
 - Yahoo Groups SOTA_Australia
 - http://au.groups.yahoo.com/group/SOTA_Australia
 - VK discussion including VK3 activation alerts
 - www.vklogger.com

Questions



Finally: Two words of warning It's addictive.