



Summits on the Air



Presentation to NERG

12 April 2012





What is SOTA?

- An award program based on operating from summits on battery, solar or human power
- Summits require clear prominence – clear height above surrounds
 - 150m in VK3
- All modes, all AR bands





SOTA in VK

- VK3: Operational with 609 summits across 8 regions
 - Central region includes Mt Dandenong, Mt Flinders, Mt St Leonard, Arthurs Seat, Mt Macedon, Mt Donna Buang
- VK1: Advanced developmental state, expect to be operational mid/late 2012
- VK2 and VK5: early efforts





The Expedition

- SOTA activations occur on mountain tops
- Activations must use permitted amateur bands
 - No CB
- Motor vehicle use
 - Cannot be used for final access to summit
 - Cannot form part of station (eg batteries, sitting in a car seat, shelter during operating, etc)





The Expedition

- Operation near the summit top
 - In VK3, 25 vertical metres
- Power by batteries, solar, human power, etc
- Activation points accumulate to operator, not callsign





The Expedition

- Require one QSO for activation
 - Counts for uniques
- Require four QSOs for summit points
 - Counts for Mountain Goat
- Summit points claimed once /year





The Chaser

- Can operate anywhere – including other summits
- Can chase each summit once per day
 - UTC day
- Can use any legal station configuration





Seasonal bonus

- Winter expeditions can attract bonus
 - Valid for activators only
- VK3: Mid June to mid October, above 1200m
 - 3 extra points





Awards

- Mountain Goat & Shack Sloth Trophies
 - Each summit worth between 1 and 10 points
 - Trophies awarded at 1,000 lifetime points





Awards

- Certificates
 - Activators, chasers and SWLs
 - 100, 200, 500, 1000, 2000, 5000 points and so on





Awards

- Uniques
 - Each unique summit worth 1 point
 - Uniques of 100, 200, 500, 1000, 2000 points and so on
- Mountain Explorer
 - Activators and chasers: Summits in 5, 10, 15, 20 and all associations





Awards

- Mountain Hunter
 - 70MHz+ award: Summits in 5, 10, 15, etc associations





Endorsements

- All CW
- All QRP
- Band, eg 160m, VHF
- Any other reasonable request supported by log





Claiming Awards

- SOTA is all database driven
 - www.sotadata.org.uk
- Activators and chasers submit logs to database
- No QSL cards required, no eQSL, LOTW required
- Management team can audit claims





Claiming Awards

The screenshot shows a Mozilla Firefox browser window displaying the SOTA Results and Summits Database website. The browser's address bar shows the URL www.sotadata.org.uk/default.aspx. The website's navigation menu includes links for Home, Logon/Logoff, View Results, Summits, and Submit Log. A user is logged in as VK3WAM. The main heading of the page is "SOTA Results and Summits Database".

Welcome to the Worldwide Summits On The Air database service.

Summits on the Air is a programme that encourages radio amateurs who enjoy hill walking and the great outdoors to take their radios with them and operate from the mountain tops.

An award scheme recognises those who activate the summits and also those that make QSOs with the activators. The programme can be operated anywhere in the world.

For more information about the SOTA program in your area, please see the main website, <http://www.sota.org.uk>

The photograph shows a man wearing a bright red hooded jacket and a blue cap, looking down at a radio he is holding. He is standing on a rocky mountain peak with a clear blue sky and distant hills in the background. A mouse cursor is visible over the image.





HF

- 40m CW, SSB most common SOTA QSO
- 20m, 15m more common currently in cycle
- 30m increasing in use
- 60m, where available, used significantly by SOTA
- Antenna: Inverted Vs, Verticals. Increased squid pole sales
- Most summits low noise





VHF/UHF

- 2m second most used SOTA band
 - Significant level of SSB – weak signal
- Innovative antennas – light & easy to transport – great band for experimentation
- 70cm used significantly less
- Repeaters cannot be used for SOTA QSO, but may be used to arrange





Microwave

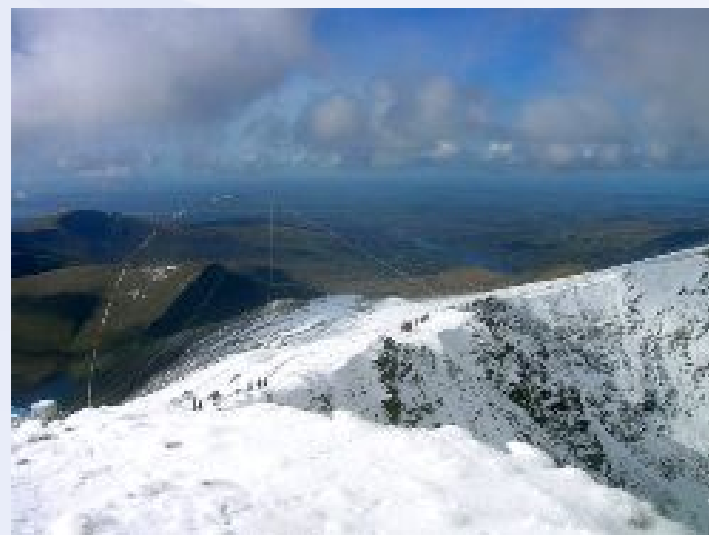
- 23cm and 3cm find greatest usage
- Yagi & other beam antennas on 23cm
- Parabolic on higher bands
- Technical challenge attractive
 - Weight
 - Power
 - Transverter design





160m

- Challenging band but growing in use
- Loaded dipoles, inverted Ls
- And beyond: 11 VLF QSOs





CW

- 45% of all SOTA Activations
- Fastest growing mode of activation
- QRP advantages
- CW dedicated rigs
 - Look! No microphone!
 - Low power on receive
 - Lowest weight
 - Class C, E finals





FM

- Easiest to get started on 2/70 FM.
- Many summits around Melbourne have 2/70 access
- Mode used in over 28% of all QSOs





Power sources

- Internal Batteries
 - FM HT – Class C amplifiers efficient
 - FT-817 NiMH pack – 1 to 2 hours
- External
 - SLA – cheap but heavy
 - Lithium based: 18650 cells, LiPo packs
 - Solar & wind
- Exotic – keep peddling!





Alerts/Spotting

SOTAwatch2 - Mozilla Firefox

File Edit View History Bookmarks ScrapBook Tools Help

SOTAwatch2

sotawatch.org/index.php

Google

ABP

SOTAwatch2 Logged in as VK3WAM | [Log out](#) | [Edit Account](#) | [Help!](#)

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This page refreshes every 1 minute. Last updated 11:01:42 UTC.

Latest Spots

[>> more spots](#) | [new spot](#)

- Sun 11:01 **S54MJ/P** on [S5/TK-009](#) 145.550 fm
(Posted by S52Q)
- Sun 10:57 **G4WSB/P** on [G/SC-008](#) 5.3985 ssb
Weak. Using mobile whip (Posted by GW4BVE)
- Sun 10:55 **DL/OE5HFM/P** on [DM/BM-283](#) 7.118 ssb
(Posted by OE5HFM)
- Sun 10:53 **HA7UL/P** on [HA/KM-014](#) 10.125 cw
QRV now [via SpotSMS] (Posted by HA7UL)
- Sun 10:53 **HA2PP/P** on [HA/KD-046](#) 10.120.5 cw
(Posted by HA7UG)

Upcoming Activations

[>> more alerts](#) | [new alert](#)

- Sun 10:11 **OM1LD** on [OM/BA-002](#) 14.060-cw,145.500-fm
QRPP 1W, QRS (Posted by OM1LD)
- Sun 10:30 **EA1GMP/P** on [EA1/PL-021](#) 145.425-fm
Yagui 3 elts. 5 w. (Posted by EA1GMP)
- Sun 10:30 **GW0PEB/P** on [GW/NW-026](#) 144.300-ssb,432.222-ssb-cw
QSY 144.333-SSB (Posted by G0PEB)
- Sun 11:00 **EI/GI4ONL/P** on [EI/IN-018](#) 7.032-cw,10.118-cw,14.062-cw
1st time activation will try to self spot +/- 30 mins (Posted by GI4ONL)
- Sun 11:00 **EI/MIOJST/P** on [EI/IN-018](#) 145.45-fm,14.250-ssb

Reflector Latest

- [SOTA NEWS MARCH 2012](#)
by G4SSH, #12 by G4SSH, 6days ago
- [Video of the sota activation DL](#)
by DL9MDI, 108mins ago
- [Electrostatic Air on summit](#)
by OE2WNL, #4 by M6EPW, 2hrs ago
- [Finding DLFF on a map of Gerr](#)
by PA3FYG, #9 by DC7CCC, 10hrs ago
- [Long Mynd G/WB-005 Quick Re](#)
by 2E0YYY, 12hrs ago
- [Daylight Saving Time Europe](#)
by MM0FMF, 12hrs ago
- [New Intermediate Licence](#)
by 2E0EYP, #77 by 2E0EYP, 13hrs ago
- [Apologies to chasers](#)
by M6EPW, 14hrs ago
- [1st activation](#)
by G7CNM, #5 by G4OIG, 22hrs ago
- [Slightly O/T - Old B class calls](#)
by M0CGH, #50 by G4OIG, 24hrs ago
- [Ben Macdui tomorrow](#)
by MM0GYX, #14 by MM0GYX, 36hrs ago

[>> more topics...](#)

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Internet Resources

- Summit data on www.sotadata.org.uk & www.sotawatch.org
- Reflector on www.sotawatch.org
- SOTA rules on www.sota.org.uk
 - General rules
 - VK3 Association Manual (hopefully soon)





Internet Resources

- www.adventureradio.de/data/
 - Google Earth KML file of summits
 - SOTA Spots/Alerts
 - Activation and chasing analysis tools
- Yahoo Groups SOTA_Australia
 - VK discussion including VK3 activation alerts
- Photos & videos linked through sotawatch
 - Activation ideas





VK3 – KRMNPA

- Amateur Radio Victoria administrate the Keith Roget Memorial National Parks Award
 - Activation within National Park Boundary
 - Chasers can be anywhere
- Over 1/3rd of VK3 SOTA summits within National Parks





Questions?

