



# Summits On The Air

“A Trip to Pine Mountain”

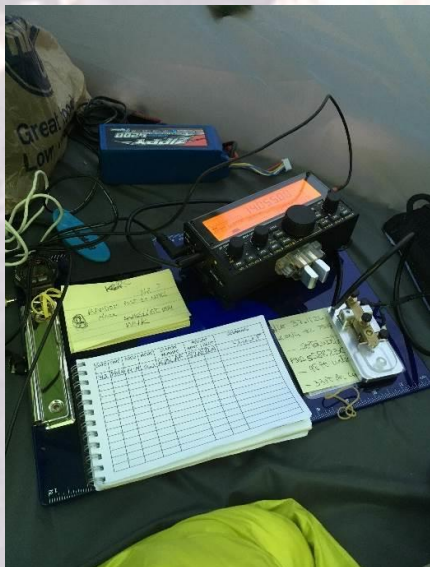
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Original SOTA PowerPoint Created by:

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# Summits on the Air



- How did it start?
- What is it?
- How do I participate?
- Can I get any awards?
- How do I start activating and what equipment should I use?



# Pine Mountain Activation

- Our SOTA trip to Pine Mountain near Whitesburg, KY [border of KY and VA]
- The Journey on June 3, 2017
- Our Equipment
- Short Video Compilation ~ 10min
- Stories and Lessons learned
- Q & A – Equipment and Gear Display



“For as long as there has been radio, amateurs have taken their stations to the tops of hills...

“It’s perhaps a little surprising then that no formal programme for activating summits existed until March 2002!”

Radcom, July 2004



# How did SOTA start?

- Original idea of John, G3WGV
- Developed with Richard, G3CWI
- Launched on March 2nd 2002
- Internet based activity
  - Industrial strength database by Gary, G0HJQ
    - 1.8 million QSO's in SOTA Database
    - More than 5,900 registered users
  - Sophisticated web portal by Jon, GM4ZFZ
    - Alerting, spotting, forum, etc
  - 55 participating countries and nearly 60,000 peaks in the SOTA database and growing fast

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- Safety and Operating

# What is the SOTA program?



“**Summits on the Air (SOTA)** is an award program for radio amateurs and shortwave listeners that encourages portable operation in mountainous areas. SOTA has been carefully designed to make participation possible for everyone - **this is not just for mountaineers!** There are awards for activators (those who ascend to the summits) and chasers (who either operate from home, a local hilltop or are even Activators on other summits).”

From [www.sota.org.uk](http://www.sota.org.uk)



# General SOTA Principles

- One set of generic rules for everyone
- DX entities form one or more “Associations”
  - USA and Canada are exceptions
- Associations maintain a list of summits
- SOTA scoring is based on elevation in that Association
- Activators, Chasers & SWLs are participants
- Various awards, Honor Rolls, etc.
- Totally Internet based administration
- Patterned after IOTA, Islands on the Air

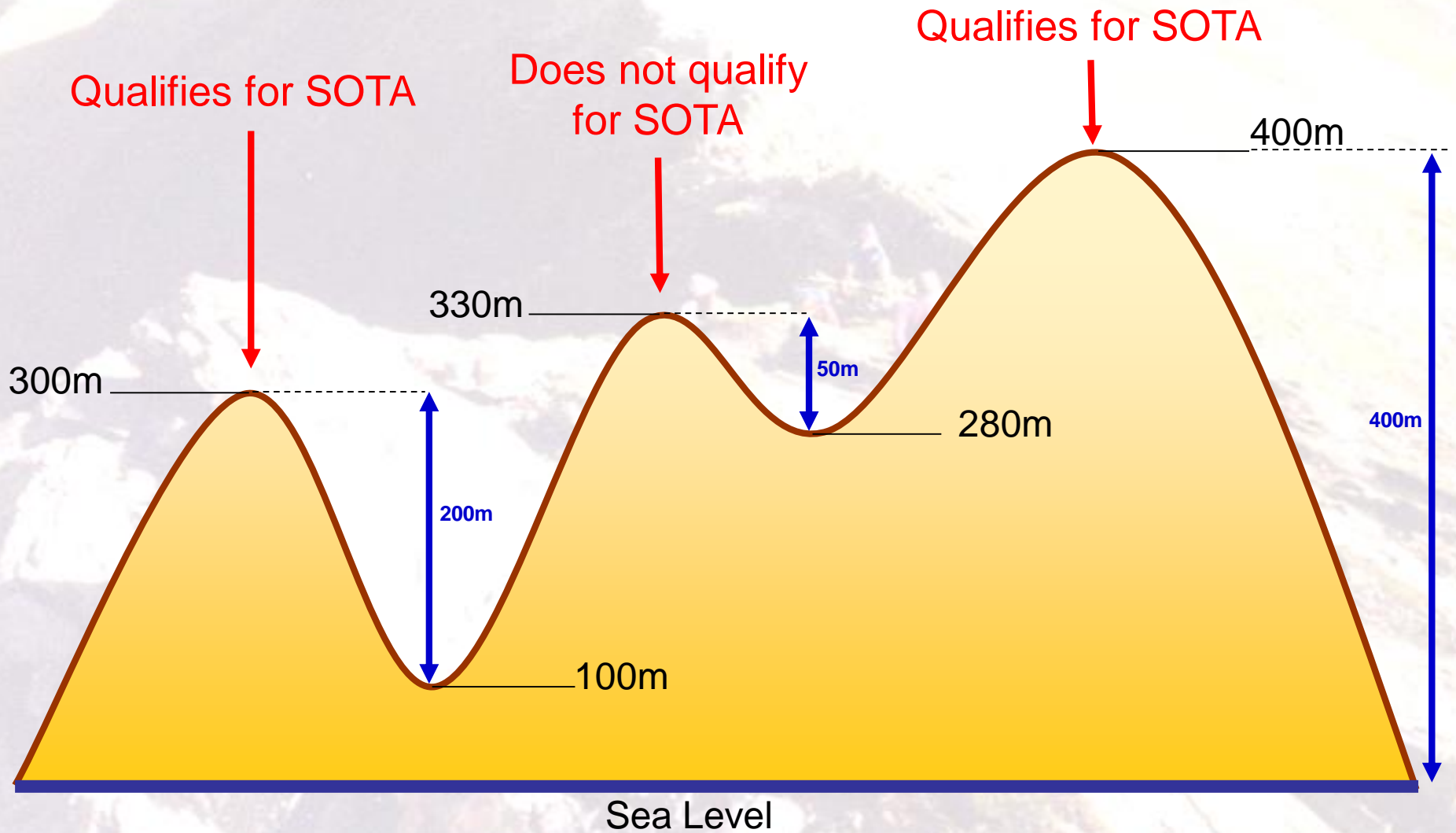




# When is a peak not a SOTA peak?

- A qualified SOTA peak is when:
  - Prominence is greater than 500 ft (150m) from surrounding peaks.
- Peak qualification rules:
  - Vertical separation concept (500' prominence)
  - Must be a readily accessible summit
    - Private property with permission only (no trespassing)
    - Respect for Native American and Government properties

# Prominence Definition





# SOTA Scoring

- Based on ASL elevation of a qualified peak
  - Varies by Association
  - May include a “seasonal bonus” for activators
  - East Coal Field 196, Knobs Arc 13, Pennyrile 5- 214  
Total
- Scoring example for WK4 – Kentucky:

Under 1500'	1 point
=>1500' to <1800'	2 points
=>1800' to <2100'	4 points
=>2100' to <2400'	6 points
=>2400' to <3100'	8 points
3100' +	10 points (Pine Mtn. 3300 Ft)

# W4K/EC014 – Pine Mountain



WA4MNT - Callsign Look x (13,106 unread) - cbravo x Elecraft Radio Group x SOTA 2017 - Google Dri x SOTA Organization | W6 x Summits on the Air x summits x

www.sotadata.org.uk/summits.aspx

Home Logon/Logoff View Results Summits Submit Log FAQ

## Summit Details

Select Association: W4K - USA - Kentucky Select Region: EC - East Coal Field Mountains Select Display Order: by Summit Ref

Select Association: W4K - USA - Kentucky Select Region: EC - East Coal Field Mountains Select Display Order: by Summit Ref

Schley Cox W4AMW

[schley73@gmail.com](mailto:schley73@gmail.com)

Notes:  
#

Region Map:  
[RegionMap](#)

### East Coal Field Mountains Summits

SOTA Ref	Name	Alt (M)	Alt (Ft)	Latitude	Longitude	Locator	Points	No. of Activations	Last Activation	Last Call	History	Info
W4K/EC-001	Black Mountain	1262	4139	36.9142	-82.8938	EM86nv	10	35	27/Sep/2017	W4/DL6AP/P	<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-002	Little Black Mountain	1116	3660	36.8507	-83.0768	EM86lu	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-003	3660	1116	3660	36.8633	-83.0371	EM86lu	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-004	Dominion Benchmark	1116	3660	36.8279	-83.1076	EM86kt	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-005	Little Black Lookout	1042	3420	36.8226	-83.1487	EM86kt	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-006	Chunklick Benchmark	1039	3410	36.7345	-83.3834	EM86hr	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-007	3380A	1030	3380	36.8959	-83.1609	EM86kv	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-008	3380B	1030	3380	36.8208	-83.2170	EM86jt	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-009	3380C	1030	3380	36.8366	-83.2569	EM86iu	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-010	3355	1023	3355	36.8832	-83.2216	EM86jv	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-011	Fox Knob	1018	3340	36.8002	-83.3766	EM86ht	10	5	22/Aug/2017	K1LIZ	<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-012	3340A	1018	3340	36.9211	-83.1233	EM86kw	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-013	3340B	1018	3340	36.9273	-83.1110	EM86kw	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-014	Pine Mountain	1006	3300	37.1126	-82.7318	EM87pc	10	2	03/Jun/2017	W4ALF	<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-015	Grays Ridge	981	3220	36.7746	-83.3011	EM86is	10	0			<a href="#">History</a>	<a href="#">Info</a>
W4K/EC-014	Pine Mountain	1006	3300	37.1126	-82.7318	EM87pc	10	2	03/Jun/2017	W4ALF	<a href="#">History</a>	<a href="#">Info</a>

HamCom SOTA pr...ppt IMG\_0715.MOV IMG\_0735.PNG Show all

4:00 PM 11/9/2017



## W4K/EC-014, Pine Mountain - 1006m, 10 Points

Quick links: [Back to W4K Association](#) | [Back to EC Region](#)

**Association:** USA - Kentucky **Region:** East Coal Field Mountains


**Latitude:** 37.1126 , **Longitude:** -82.7318

**QTH Locator:** EM87pc

**Today's Sunrise:** 12:04 UTC , **Today's Sunset:** 22:25 UTC

[Google Map](#) | [Google Earth](#) | [OpenStreetMap](#) | [SOTA Map](#)

### Resources

Feel free to add External Links  and Articles relating to this summit that activators and chasers may find useful or interesting. Please read the disclaimer notice at the bottom of the page.

**Pine Mountain Trail Info** Submitted by AI4BJ on (09 Jun 2017)

DISCLAIMER: The SOTA programme and its Management Team is not responsible for the content of external internet sites or for information added by third parties to this website. Please contact the SOTA Management Team if you have concerns about submitted content. The existence of information relating to a particular location does not confer or imply any right of access. Participation in the SOTA Programme is at the risk of the participant.

### Summit Activity

**Total Activations:** 2 [View All](#)

#### Latest By:

AI4BJ on 03 Jun 2017

W4ALF on 03 Jun 2017

#### First Activated by:

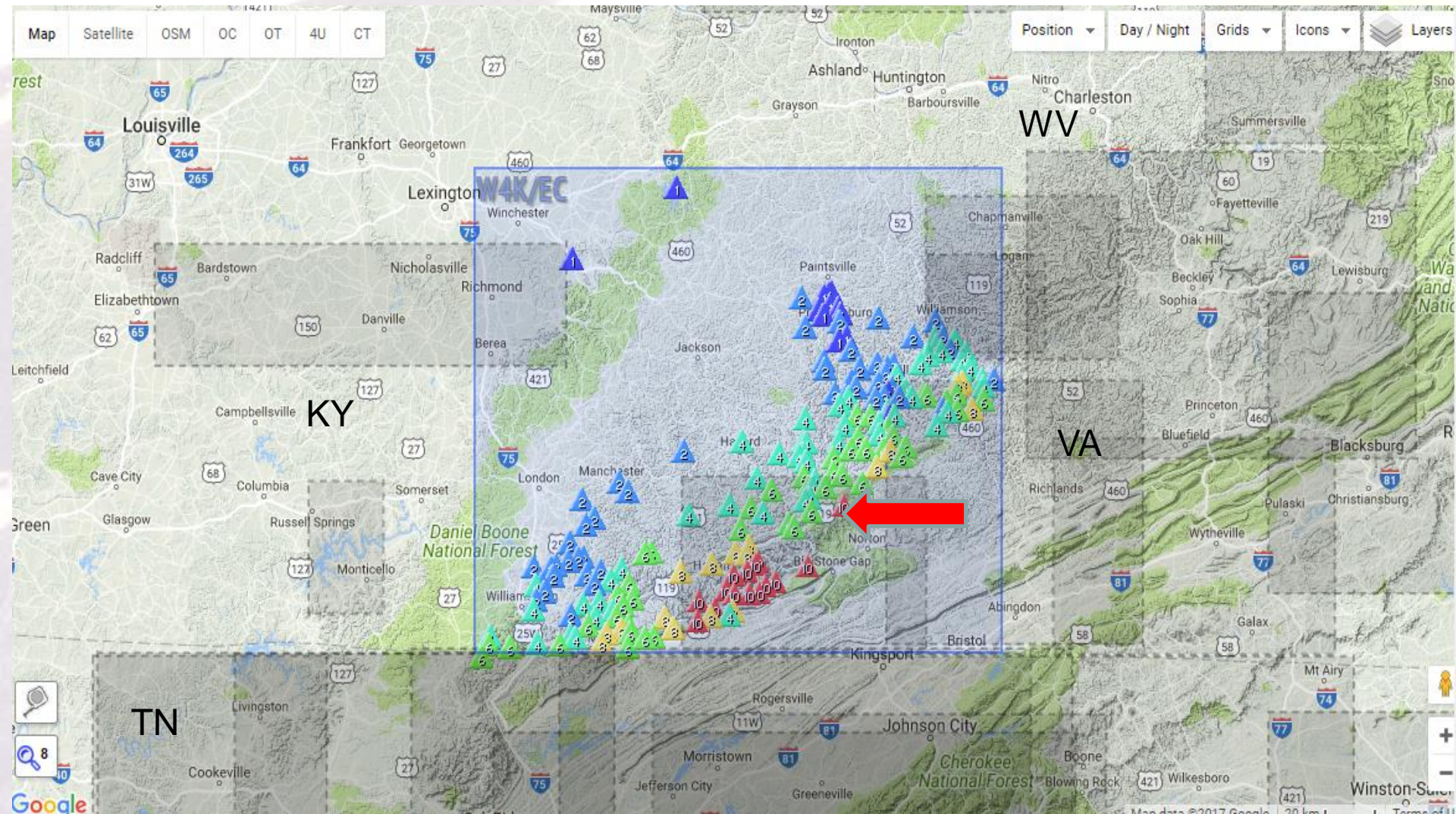
W4ALF on 03 Jun 2017



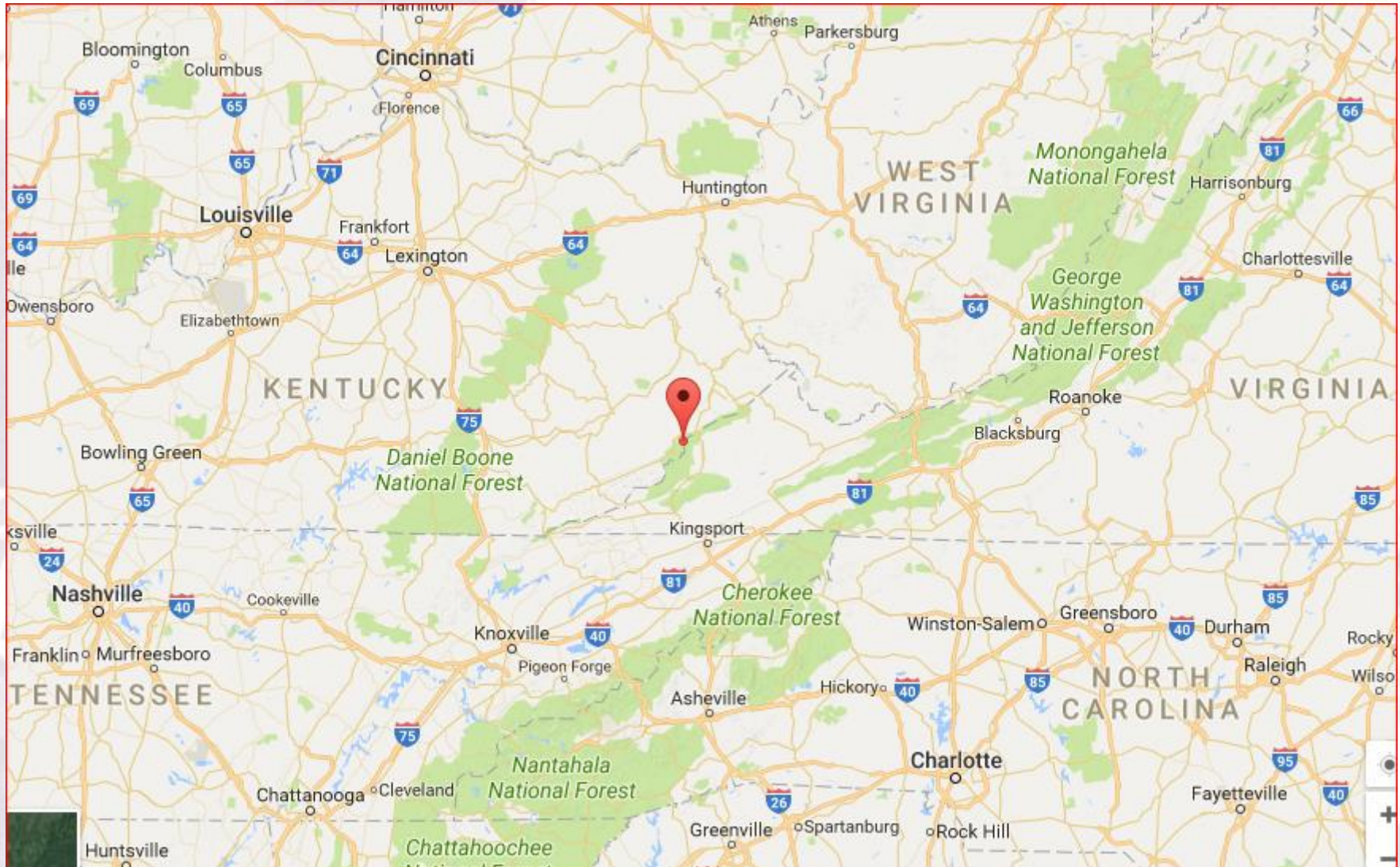
#### 25 QSOs on these bands:

40m	12	48%
20m	13	52%

# W4K/EC014 – Pine Mountain



# W4K/EC014 – Pine Mountain



# W4K/EC014 – Pine Mountain







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# Participation Roles

- **Activators** – those who “activate” a peak
- **Chasers** – those who work the activator
- **Short Wave Listeners** – those who can confirm a qso
- Each group scores “points” for their participation. Points then total for awards.



# Web Tools for SOTA

- [www.sota.org.uk](http://www.sota.org.uk)
  - The main site about the SOTA program
- [www.sotawatch.org](http://www.sotawatch.org)
  - Alerts, spots, map, and a forum
  - Register to participate
    - Anyone can read information posted
- [database.sota.org.uk/](http://database.sota.org.uk/)
  - Log chasing and activating QSO's
  - Register to enter QSO's and see more detail

This page refreshes every 1 minute. Last updated **15:03:48** UTC.

## Latest Spots

- Mon 14:54 **GW1INK/P** on [GW/SW-022](#) **5.3985 ssb**  
 Steve with his usual 59 signal (Posted by ON3WAB)
- Mon 14:49 **GW1INK/P** on [GW/SW-022](#) **5.3985 ssb**  
 (Posted by G4BLH)
- Mon 14:05 **HB9CKV/P** on [HB/GR-111](#) **3.746 ssb**  
 tks qso Hans (Posted by HB9AAQ)
- Mon 13:59 **G4OWG/P** on [G/SC-005](#) **5.3985 ssb**  
 (Posted by GW4BVE)
- Mon 13:24 **G4OWG/P** on [G/SC-005](#) **5.3985 ssb**  
 \*In about 15 mins (Posted by G4OWG)

>> [more spots](#)

## Upcoming Activations

- Tue 08:30 **F5UKL/P** on [F/PO-146](#) **10.123-cw,14.061-cw,7.031-cw**  
 +/-30mn. Hope to meet you. (Posted by F5UKL)
- Tue 09:30 **OE/HA5AZC/P** on [OE/BL-011](#) **7.032-cw,145.525-fm**  
 (Posted by HA5AZC)
- Tue 11:00 **F6ENO/P** on [F/AM-330](#) **7.032-cw,7.099-ssb,10.115-cw**  
 AM-340 later, starting 5 day trip in F/AM, will try to alert (Posted by F6ENO)
- Tue 13:30 **G1OPV/P** on [G/WB-006](#) **145-fm,70-fm,433-fm**  
 Also 144 SSB if wx ok (Posted by G1OPV)
- Wed 11:00 **G1OPV/P** on [G/WB-015](#) **145-fm,70-fm,433-fm**  
 Also 144 SSB if wx ok (Posted by G1OPV)

>> [more alerts](#)

## Reflector Latest

### [SOTA T Shirts, Sweatshirts and](#)

by GM4TOE, #19 by ON3WAB, 8mins ago

### [SOTA NEWS SEPTEMBER 2009](#)

by G4SSH, #9 by M6WOW, 17days ago

### [Elecraft K1 kit seeking a good](#)

by G14FLG, #4 by G8ADD, 7mins ago

### [DD1LD-first Mountain Goat in C](#)

by DJ5KZ, #16 by G8ADD, 15mins ago

### [2m Backpackers Contest](#)

by G3CWI, #35 by M3EYP, 54mins ago

### [250+ Uniques](#)

by G3CWI, #10 by MM0FMF, 76mins ago

### [wrong refernce !](#)

by HB9AFI, #28 by G4OIG, 5hrs ago

### [O/T - Radio at school](#)

by M1EYP, #44 by M1EYP, 18hrs ago

### [Worldwide SOTA first!](#)

by M0LKB, #2 by DL3SBA, 19hrs ago

### [Video Upload](#)

by MM0ROV, #11 by G3CWI, 21hrs ago

### [triple French SOTA F/AM-256-](#)

by F5HTR, #2 by F6ENO, 22hrs ago

### [Don't panic !!!](#)

by G3VQO, #2 by GW7AAV, 25hrs ago

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

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# SOTA Awards

- Certificates
- 100, 250 and 500 points
- Mountain Goat
  - 1000 activating points
- Shack Sloth
  - 1000 chasing points
- SWL
- Association awards
- Further certificates at 2500, 5000, 10000 points





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# Bands and Modes

- VHF+
  - A lot of 2m FM
  - SSB
  - CW occasional
- HF
  - A lot of CW, due to use of QRP equipment
  - 10118 kHz, 14060 kHz, 14342.5 kHz are popular



# Principal Rules for Activators



- Cannot use motorized transport to summit
- Must operate from portable power source
- Must carry all equipment to summit
- Must make at least four QSOs
- QSO's via repeaters don't count

# Equipment Used for Pine Mtn.



- It's all a lot easier these days!
  - Equipment is smaller, lighter and more efficient
  - Battery technology has improved immensely
- W4ALF – KX2 Radio, Lifepo4 4200Mah Batt, Wire Antenna 66ft Qrp OCF, hung in trees with throw bag/Throw line
- AI4BJ – KX3 Radio, Lifepo4 4200Mah Batt, Wire Antenna in sloper configuration with fiberglass mast as support.



# Typical SOTA Equipment



Handheld Radios  
e.g Yaesu VX7



Mountain Topper MTR3B



Portable Radios e.g. Yaesu FT817

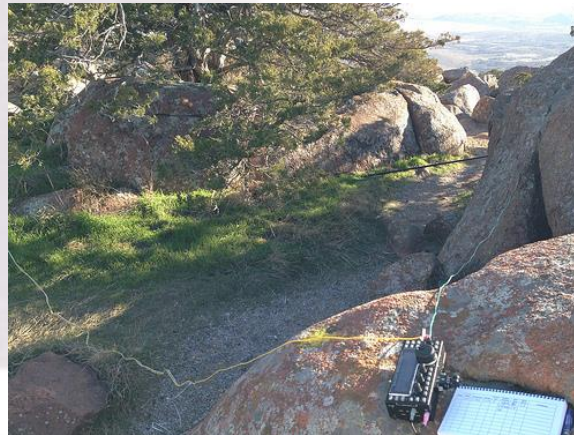


Elecraft line KX2 and KX1



QRO (relatively light) Radios e.g. Yaesu FT857

# Typical SOTA Equipment



Wire antennas: (EFHW, OCFD, linked dipole, resonant dipole) or Commercial (Portable Mag Loop or Buddipole system)

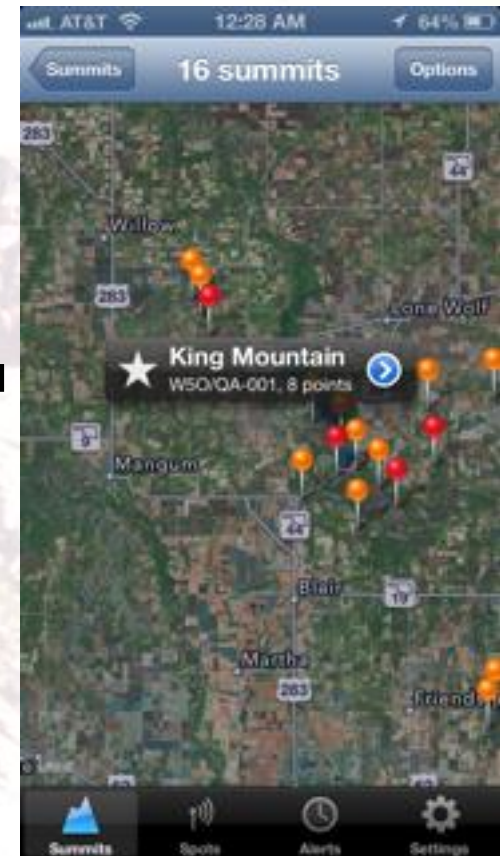
Support for Ant: Fiberglass Pole/Mast or Throw Line and Weight where trees are avail...

Batt: LiPO/LiFePO/etc are used due to light weight, high output

# Technology



- Apps!
  - iPhone
    - SotaGoat
    - Pocket SOTA
    - HamLog/Pignology
    - RepeaterBook (repeater QSOs don't count but they can drum up some 146.52 or if you REV and log a simplex QSO without the repeater, it counts)
  - Android
    - Pocket SOTA
    - SOTA Finder
    - SOTA Logger





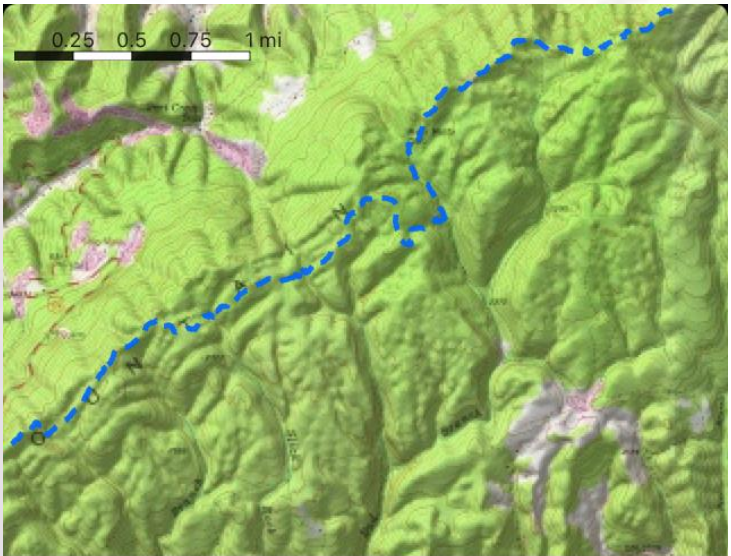
# SOTA Program Summary

- So now go take a hike; go climb a peak!
  - Chasing
  - Activating
- Use the SOTA Internet based tools
  - Alerting
  - Spotting (if you won't have internet on the summit, pre-spot, alert, cell ph a buddy, APRS)
  - Database
- Be careful – it's addictive!



**Play Video Here**





◀ Back      Track      Close ▶



**Continue Recording**



# Have a go!



- You don't have to be a mountaineer!
  - Some summits where you can drive to the top, just walk out of the activation zone and then back up
  - You can participate from your shack
- But if you are...
  - There are many first expeditions yet to be done
  - It's a good excuse to enjoy the outdoors on the summit looking at the views
  - It's a great way to bring two or more hobbies together



# Questions?

[www.sota.org.uk](http://www.sota.org.uk)

[www.sotawatch.org](http://www.sotawatch.org)

[http://groups.yahoo.com/  
group/nasota/](http://groups.yahoo.com/group/nasota/)

## END OF PRESENTATION