SOTA



Summits On The Air
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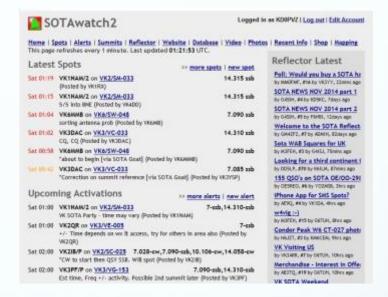
Read the History Online Let's Jump Into the Fun

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Websites

- Official SOTA Main Website: <u>www.sota.org.uk</u>
- Official SOTA Spotting Tool: <u>www.sotawatch.org</u>
- Official SOTA Database: <u>www.sotadata.org.uk</u>
- Our Area's Website: http://www.qsl.net/kd9kc/
- USA-W0 Website: http://w0-sota.org
- Summits Website: http://listsofjohn.com
- NA SOTA Reflector: http://groups.yahoo.com/group/nasota
- Missouri SOTA Website: http://www.mosota.org/
- NA SOTA Website: <u>http://na-sota.org</u>
- Activation map: <u>http://www.sotamaps.com/</u>



What is it?

- SOTA is an award program for radio amateurs and sw 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 even as activators on other summits).

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
- Various awards
- Totally Internet based
- Patterned after Islands On The Air

Equipment

- Radios
 - Popular QRP rigs
 - KX-3
 - FT-817_
 - KX-1 & II
 - Ten-Tec (various)
 - KD1JV ATS, MTR, PFR
 - Whatever you can carry with you!
 - 100W rigs are not so popular due to weight
 - FT-897_ (portable 20/100W)
 - IC-706____
 - Whatever you can pack + batteries









Equipment Cont...

- Antennas
 - Random Wire
 - EFHW
 - Buddipole
 - Windom (various)
 - End fed Zepp (various)
 - Dipole with clip on length/band extenders
 - Homebrew verticals
 - G5RV and variants
- Throw rope/weight
- Crappie Pole/Jackite for supporting wire antennas





Apps

- Smart phones help... when there's coverage
 - SOTA Goat (iPhone)
 - SOTAwatch (google play)
 - SOTA finder (google play)
- SOTA Goat is extremely useful.
 - Map of the world with ALL summits
 - Alert
 - Spot
 - Search

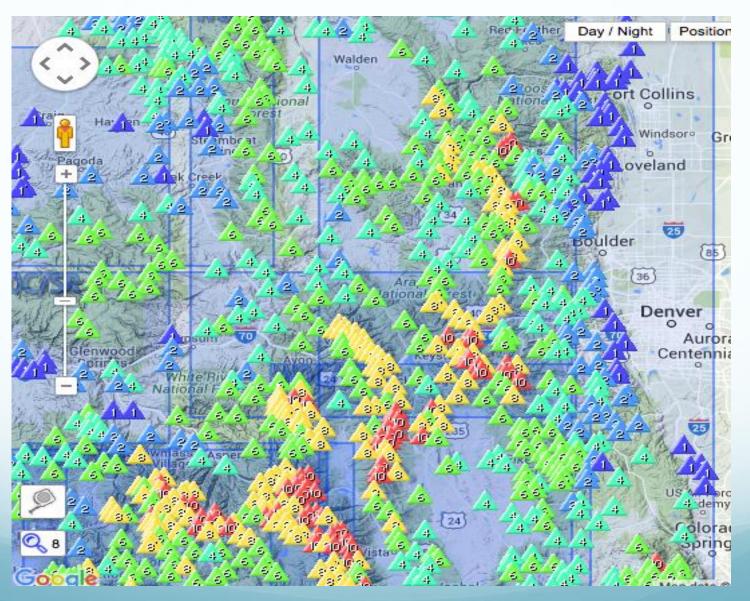




Travel/Weather

- Plan your trip ahead of time. Scout out a day trip or an overnight stay in either a hotel, a campsite, or with family/friends.
- Bring a camelback or enough bottled water and a snack you can pack with you
- Bring a buddy if you're hiking/bushwacking
- Look at weather forecasts, bring proper clothes
- Temp goes down 5.4 degrees every 1000'
- Going on a business or family trip? Scout out the summits!

What's Close?



Why is activating fun?

- You are the DX!
- It is great practice for contests, field day, EMCOMM, etc
- Low Noise level on summit (usually) means quiet receive signals
- Antennas can often be much lower to the ground, and more effective
- Exercise! Outdoors! Ham Radio!

Annual SOTA events

- 1st Sunday in August Colorado Ham 14er event
- Week of 14er event RM Rendezvous' in Buena Vista
- 1st Saturday in May QRPTTF
- Mid September NASOTA weekend
- Int'l SOTA weekend coincides with QRPTTF
- ARRL VHF contests
- Lots of local weekends for associations

Safety

- Some summits you can drive within 75' of the activation zone, you can probably handle that by yourself.
- Please don't go hiking up a remote summit by yourself (personal experience, you may NEED help)
- Leave a note on your dash saying where you're headed and a date/time
- Bring a cell phone and a 2 meter HT. Program local repeaters
- Hunting season? Wear a safety vest.
- Rock hopping (or popular 14ers)? Wear a helmet.
- Zig-zag up the mountain, take breaks, keep your laces tied
- Get a first aid kit and either pack it or leave it in the vehicle



Logging

- Pen and Paper!
- Some use an iPad or Nexus/Android tablet with a wireless serial port from pignology.net
- After you're done logging QSOs, go to http://www.sotadata.org.uk/ and upload/enter your logs
- One thing that is really appreciated is an activation report if you activated a summit. Send your report and your log to the nasota Yahoo! group
 - Sometimes you'll find that you can't read your writing or got a call sign wrong. Most chasers and activators are on the nasota reflector
- S2S Summit to Summit contacts are logged under chaser entries on the website.

Logging - Chaser Entry

a. Select the Association, Region and Summit					
Association:	W5O − USA − Oklahoma <u>▼</u>				
Region:	WI (Wichita Mountains)				
Summit:	W5O/WI-002 (Scott, Mount)				
Date (dd/mm/yy) Time UTC (hh:mm)					
, ,,,,					
, ,,,,					
Time UTC (hh:mm) Callsign YOU used					
Time UTC (hh:mm) Callsign YOU used Other Callsign	Select Band ▼				
Time UTC (hh:mm) Callsign YOU used Other Callsign Band					
Time UTC (hh:mm)	Select Band 💌				

Modes

- CW is very popular
- During contests, try WARC bands
- SSB works on other bands too! Don't stay on 20m, go to 40/30/17/10 so adjacent states, locals, band openings can work you. Frustrating to hear people in QSO with a summiteer but you're in the skip zone of the summit operator.

Chasing

- sotawatch.org is your friend, look at alerts to plan, spots to jump on the mini-pileup
- If you run MS Windows, there's an app that will alert you when a filtered summit or call sign is spotted.
 SOTA Spot Monitor by KU6J
- Minimum report is call sign and signal report, some also report grid square, name, state, etc... but usually keep it short since many times the activator is COLD and trying to work as many stations as they can before heading back down.

Chasing Cont...

- Some trips are planned on the nasota Yahoo! group with help from the members.
- Activating a mountain can lead to your own chaser contacts as summit to summit contacts happen fairly often.
- The pileups are usually in the single digits to teens, with 20+ possible on a weekend. Throw your call sign out there after you hear QRZ or the end to their calling CQ
- It's usually windy on a summit so be patient and keep trying.
 If you're using CW, they may be wearing gloves or have shaking hands, take that into consideration

Activating

- I usually start with some published QRP frequencies
- CW
 - 20m 14.061
 - 30m 10.110
 - 40m 7.03[1,2,3] sometimes 7.029 which can be DX 'up'
 - 160m 1.81 (very little 80m/160m on summits)
- SSB
 - 40m 7.285 in the morning, below 7.175 Extra
 - 20m 14.3425
- When none of these work, go up/down some

Activating Cont...

- More calling freq, but you can use what you want!
 - SSB
 - 20m 14.285 & HF Pack Freq 14.3425
 - 15m 21.385, 28.285
 - 10m 28.885, 28.385
 - CW
 - 20m 14.060
 - 17m 18.096
 - 15m 21.060, 21.110
 - 12m 24.906
 - 10m 28.060, 28.110
 - 6m 50.060
 - 2m 144.060, 144.200
 - FM 2m **146.52**, 144.585 / SSB 144.285

Spotting/Alerting

- This is why having a calling freq isn't so important. If you Alert that you're headed to a summit and should be there around x:xx AM/PM (UTC), people will be waiting for you/calling for you.
- When you are spotted by someone, they will post a spot to sotawatch.org and then prepare to be inundated with your own little pileup. This will make you happy happy happy.
- You may self spot with SOTA Goat if you have internet, or if you are on CW, a RBN Gate will spot for you if you post an alert before you leave.

Awards

http://www.sota.org.uk/Awards

At 1,000 points Activators achieve "Mountain Goat" status and Chasers/SWLs are "Shack Sloths". Achieving "Mountain Goat" and "Shack Sloth" status requires considerable dedication and effort and so, trophies can be claimed to mark this significant milestone. Each 9cm x 9cm "Ice block" is made entirely by hand in the Scottish Highlands. Craftsmen create a unique "running scallop" along each edge of the raw glass so each trophy will be unique. The trophy will be individually engraved with your callsign and the year in which you reached 1,000 points. Endorsements like "All CW" or "VHF" can also be engraved for a small additional charge.

"Ice Block"



KC5CW on top of King Mtn

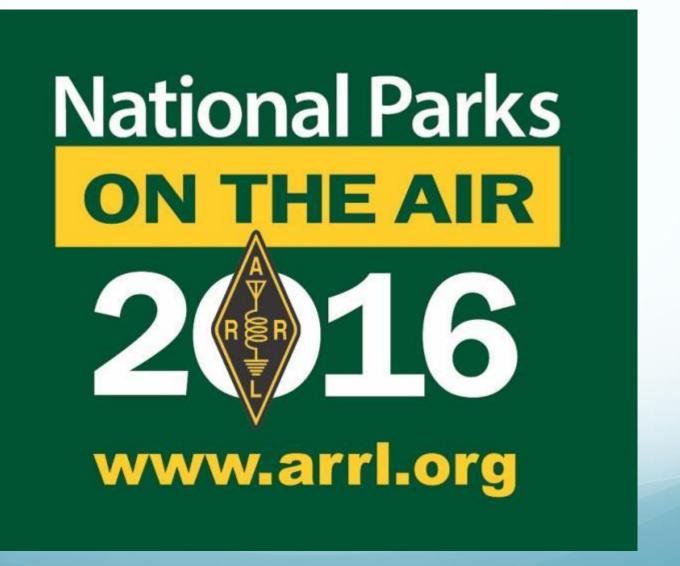


AD0KE on W0D/BB-001

using Bit20X won at Tech Fest 2013!



National Parks on the Air



National Parks on the Air

- ARRL sponsered
- January 1st December 31st, 2016
- Operate from anywhere in a US National Park
- Announce plans and log contacts in LoTW
- Combine with SOTA! Many US Nat'l parks have multiple SOTA summits
- Colorado has ~ 54 National Park / SOTA combos
- NASOTA Yahoo group has Excel data and info

Some SOTA peaks in Colorado that are in National Parks

24	W0C/FR-070	W0C/FR-070 Castle Mountain 2687m 2pts	Rocky Mountain	National Park	WOC
25	W0C/FR-110	W0C/FR-110 Longs Peak 4336m 10pts	Rocky Mountain	National Park	WOC
26	W0C/FR-111	W0C/FR-111 Chiefs Head Peak 4131m 10pts	Rocky Mountain	National Park	W0C
27	W0C/FR-115	W0C/FR-115 Ogalalla Peak 3997m 8pts	Rocky Mountain	National Park	W0C
28	W0C/FR-116	W0C/FR-116 Isolation Peak 3990m 8pts	Rocky Mountain	National Park	W0C
29	W0C/FR-117	W0C/FR-117 Mount Julian 3933m 8pts	Rocky Mountain	National Park	W0C
30	W0C/FR-118	W0C/FR-118 Stones Peak 3931m 8pts	Rocky Mountain	National Park	W0C
31	W0C/FR-119	W0C/FR-119 12716 3868m 8pts	Rocky Mountain	National Park	W0C
32	W0C/FR-123	W0C/FR-123 Trail Ridge 3758m 6pts	Rocky Mountain	National Park	W0C
33	W0C/FR-127	W0C/FR-127 Signal Mountain 3426m 6pts	Rocky Mountain	National Park	W0C
34	W0C/FR-128	W0C/FR-128 Confluence Peak 3413m 6pts	Rocky Mountain	National Park	W0C
35	W0C/FR-145	W0C/FR-145 McGregor Mountain 3190m 4pts	Rocky Mountain	National Park	W0C
36	W0C/FR-150	W0C/FR-150 Thunder Peak 3083m 4pts	Rocky Mountain	National Park	W0C
37	W0C/FR-152	W0C/FR-152 The Needles 3063m 4pts	Rocky Mountain	National Park	W0C
38	W0C/FR-155	W0C/FR-155 Deer Mountain 3046m 4pts	Rocky Mountain	National Park	W0C
39	W0C/PR-002	W0C/PR-002 Mount Richthofen 3936m 8pts	Rocky Mountain	National Park	W0C
10	W0C/PR-006	W0C/PR-006 Lulu Mountain 3720m 6pts	Rocky Mountain	National Park	W0C
11	W0C/PR-028	W0C/PR-028 McHenrys Peak 4054m 8pts	Rocky Mountain	National Park	W0C
12	W0C/PR-041	W0C/PR-041 Howard Mountain 3897m 8pts	Rocky Mountain	National Park	W0C
13	W0C/PR-045	W0C/PR-045 Sprague Mountain 3867m 8pts	Rocky Mountain	National Park	W0C
14	W0C/PR-046	W0C/PR-046 Nimbus Mount 3865m 8pts	Rocky Mountain	National Park	W0C
15	W0C/PR-051	W0C/PR-051 Andrews Peak 3822m 8pts	Rocky Mountain	National Park	W0C
16	W0C/PR-054	W0C/PR-054 Mahler Mount 3800m 6pts	Rocky Mountain	National Park	W0C
17	W0C/PR-055	W0C/PR-055 Specimen Mountain 3799m 6pts	Rocky Mountain	National Park	W0C
18	W0C/PR-057	W0C/PR-057 Hiamovi Mountain 3771m 6pts	Rocky Mountain	National Park	W0C
19	W0C/PR-058	W0C/PR-058 Watanga Mountain 3764m 6pts	Rocky Mountain	National Park	W0C
50	W0C/PR-060	W0C/PR-060 Snowdrift Peak 3734m 6pts	Rocky Mountain	National Park	W0C
51	W0C/PR-063	W0C/PR-063 Nakai Peak 3716m 6pts	Rocky Mountain	National Park	W0C
52	W0C/PR-068	W0C/PR-068 Twin Peaks 3637m 6pts	Rocky Mountain	National Park	W0C
53	W0C/PR-076	W0C/PR-076 Jacketraw Mountain 3560m 6nte	Rocky Mountain	National Park	WIC