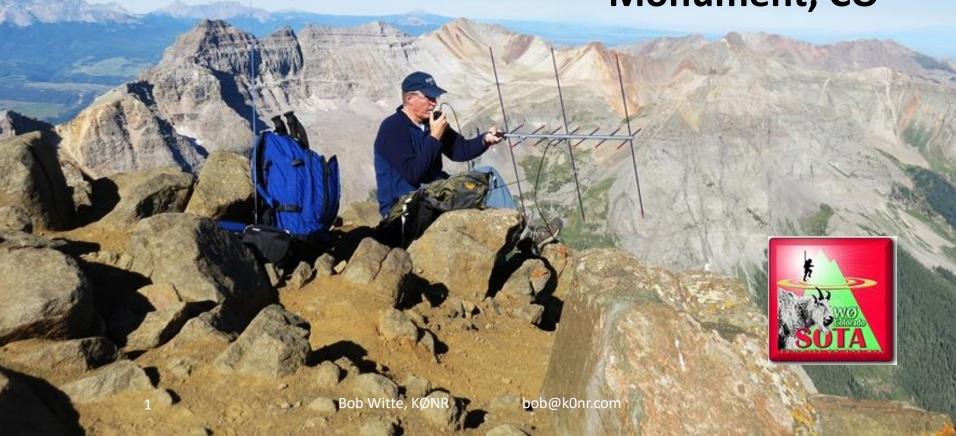
# Summits On The Air Colorado Style

Bob Witte, KØNR bob@k0nr.com Monument, CO



# Agenda

- 1.Colorado 14er Event
- 2. Summits On The Air (SOTA)
- 3.Summary, Q&A



### The Colorado 14er Event is:

- Held the First Full Weekend in August (August 6-7, 2016)
- This year the event is all weekend (Saturday and Sunday, Mountain Time)
- Prima y ocu E(ch th) Fici 4,70 foot sum ats in blorado
- Includes the 1748 SOTA peaks in Colorado
- Includes VHF, HF, all modes
- Activate mountains and chase mountains

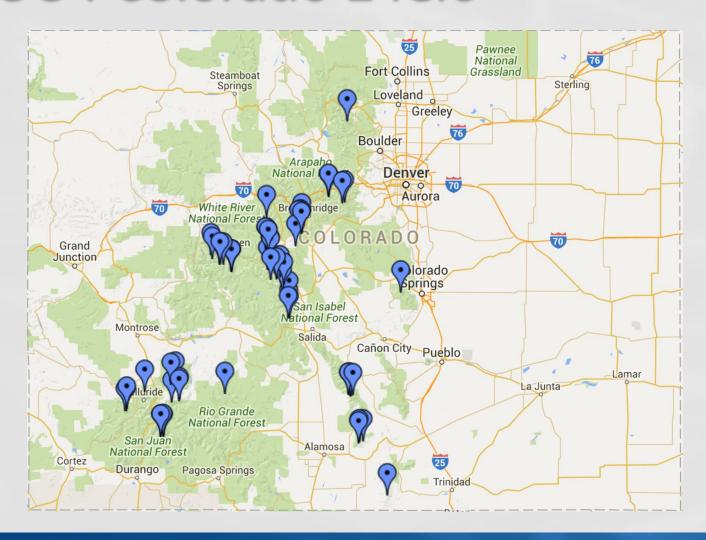


### The Colorado 14ers

- Colorado Mountain Club list of 54 Peaks with elevations 14,000 feet or higher
- Drive-Up 14ers:
  - Pikes Peak, Mount Evans
- All of the rest require foot power
  - Varying degree of difficulty, none "easy"
  - Safety First, Be Prepared



### The 54 Colorado 14ers





# **Operating Tips**

Most common frequencies:

147.42, 147.45, 147.48 MHz FM

446.00, 446.025 MHz FM

14.060 MHz CW

14.345 MHz SSB

Use any legal amateur band/mode

### Mountaineering Safety:

Be Prepared Know Your Route Know Your Capability

### Be Concerned About:

Weather
Lightning
Gravity





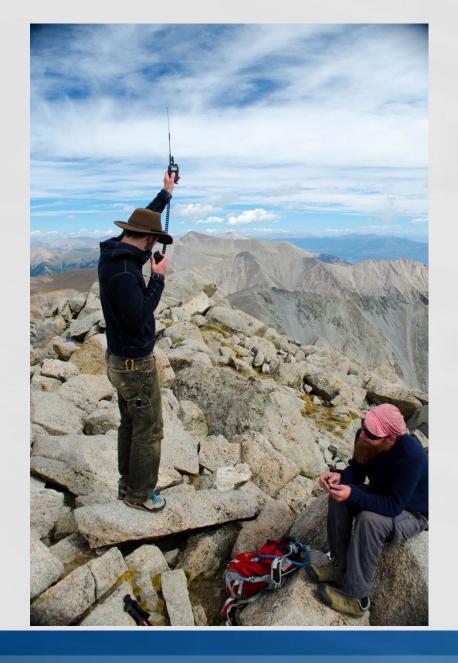
# Steve WGØAT at 14,000 Feet











David KI6YMZ and Ben KDØPNS on Mt Shavano





# Hon Chu KQ6EE on Mt Belford



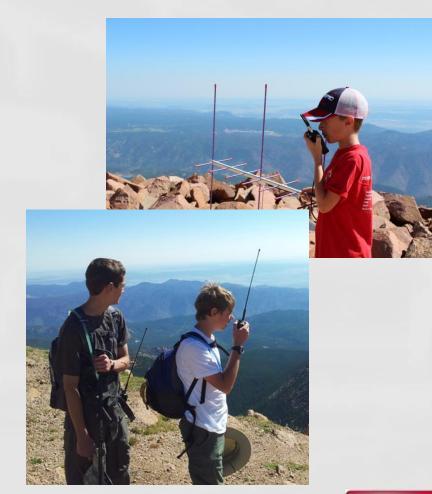




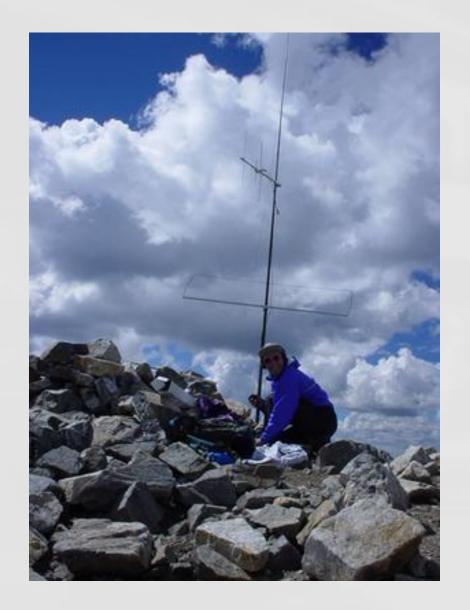
# **Boy Scouts On Pikes Peak**











# Peter K3OG on Grays Peak

Note: Yagi for 2m and 70 cm

Maxon for 6m





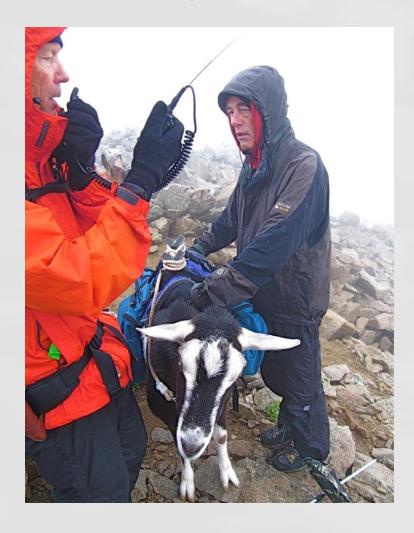
### David KI6YMZ on Mt Elbert 2015







# Steve WGØAT and Guy N7UN



It's Not Always
Warm and Sunny











# Summits On The Air (SOTA)

- Two ways to participate
  - Activator
  - Chaser
- Points and Award System
- Over 1700 SOTA summits in Colorado
- A wide variety of difficulty and elevation
  - From 5398 feet to 14,443 feet
- SOTA activation requirements:
  - summit must be on the SOTA list
  - equipment must be carried (no minimum distance)
  - portable power (no fossil fuel generators)



# **SOTA Scoring**

Based on ASL elevation of a qualified peak

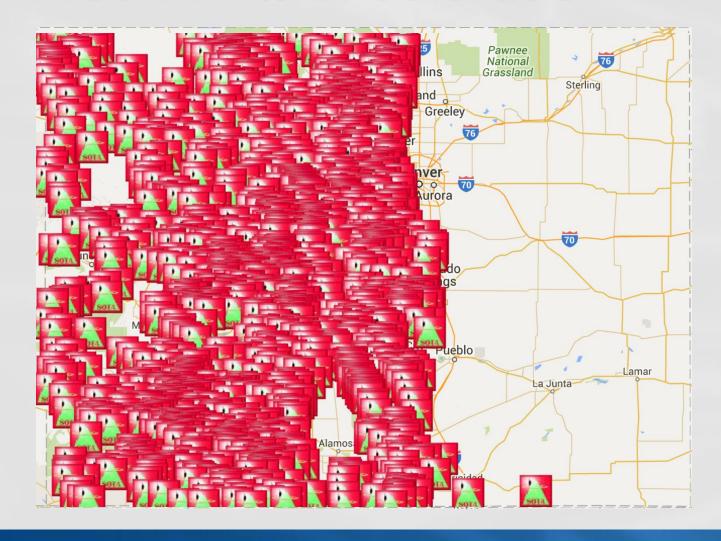
May include a "seasonal bonus" for activators Scoring for WØC – Colorado:

T point (225 peaks)	Under 8000'	1 point	(225 peaks)
---------------------	-------------	---------	-------------

May vary by association based on terrain



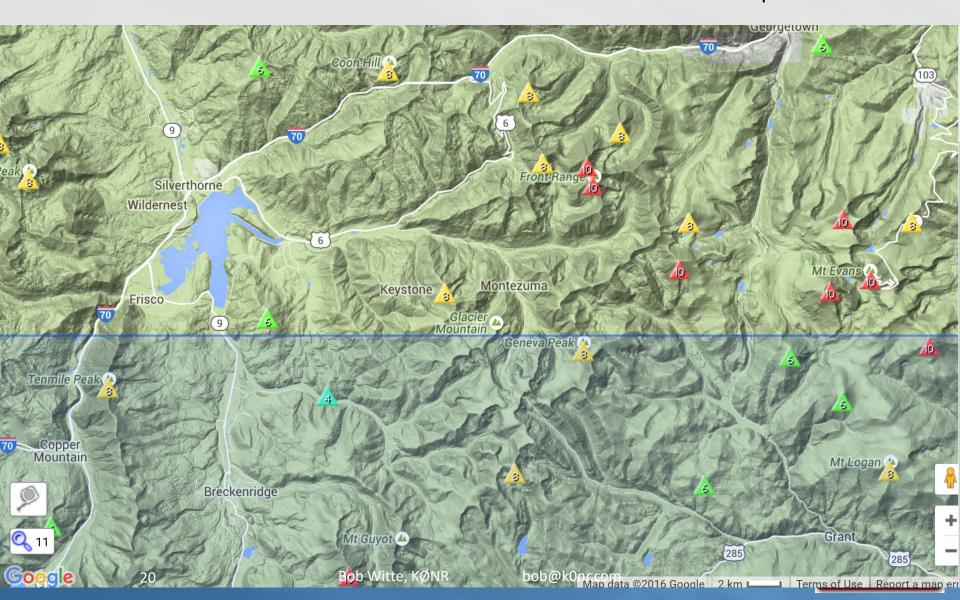
# **SOTA Summits in Colorado**





# **SOTA Peaks Near Keystone**

Triangles indicate SOTA peak and number of SOTA points





<u>Home</u> | <u>Spots</u> | <u>Alerts</u> | <u>Summits</u> | <u>Reflector</u> | <u>Website</u> | <u>Database</u> | <u>Video</u> | <u>Photos</u> | <u>Recent Info</u> | <u>Shop</u> | <u>Mapping</u> This page refreshes every 1 minute. Last updated **03:33:38** UTC.

Latest Spots	>> more spots   new spot
Sun 21:25 <b>K4HYJ</b> on <u>W4G/NG-035</u> QRT - leaving summit. (Posted by KD9KC)	14.000 other
Sun 21:19 K4HYJ on W4G/NG-035 Nice sig 57 near Montreal 73\'s de ve2jfm (Page 1)	14.305 ssb osted by VA2VL)
Sun 21:14 <b>K4HYJ</b> on <u>W4G/NG-035</u> 56 in Oklahoma (Posted by KA5WRG)	14.304.7 ssb
Sun 21:13 <b>K4HYJ</b> on <u>W4G/NG-035</u> 33 in OR (Posted by NS7P)	14.3047 ssb
Sun 21:11 K4HYJ on W4G/NG-035 NO COPY IN KANSAS (Posted by AA0LV)	14.304 ssb
Upcoming Activations	>> more alerts   new alert
Mon 13:00 DF2GN/P on DM/BW-376 28-cw,21-c first cw act. of this summitalso SSB on 14 DF2GN)	w,18-cw,14-cw,10-cw,7-cw .280 / 7.118 (Posted by
Mon 16:30 <b>WO6M</b> on <u>W6/CT-009</u> ETA approx (Posted by WO6M)	10.110-14.061-21.062-cw
Mon 17:00 NM5S on W5N/PW-038 start on 40m (Posted by NM5S)	7.031-cw,14.061-cw
Mon 19:30 NM5S on W5N/PW-037 Possible access issues. If OK will start on 40r	7.031-cw,14.061-cw m. (Posted by NM5S)
Mon 20:00 <b>WO6M</b> on <u>W6/CT-054</u> ETA approx (Posted by WO6M)	10.110-14.061-21.062-cw

### Reflector Latest

### SOTA NEWS MARCH 2013

by G4SSH, #10 by G4SSH, 15days ago

### **Dealing With Disruptive Opera**

by G8ADD, #43 by VA2SG, 70days ago

### The Shropshire 2-pointers...

by M1EYP, 2hrs ago

### Frenni Fawr today

by GW4VPX, #20 by M1EYP, 3hrs ago

### Not in log for HB/AR-008?

by HB9DST, 5hrs ago

### BW-159 delta loop

by DF2GN, 5hrs ago

### G4YSS:G/NP-006; NP-015; NP-C

by G4YSS, #4 by M0CGH, 6hrs ago

### VIDEO SOTA EC2AG/P EA2/BIO-

by EC2AG, #4 by M6RGF, 6hrs ago

### Lake Peak, NM Pictures

by KE5AKL, #3 by G6ODU, 9hrs ago

### SOTA Summit Paddles

by WGOAT, #11 by G8TMV, 12hrs ago

### Q. When is a spot not a spot?

by G4ISJ, #44 by G4ISJ, 18hrs ago

### Mt Sterling Activation report a

by KK4NQQ, #4 by N2XJS, 25hrs ago

### W0C/FR-004, Pikes Peak - 4292m, 10 Points

Quick links: Back to W0C Association | Back to FR Region

Association: USA - Colorado Region: CO-Front Range

Latitude: 38.8406 , Longitude: -105.0444

QTH Locator: DM78lu

Today's Sunrise: 12:02 UTC , Today's Sunset: 01:52 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.

Handicap access. Submitted by KD5KC on (13 Apr 2014)

Summit access. Submitted by KD5KC on (13 Apr 2014)

KONR: How To Do a SOTA Activation on Pikes Peak & Submitted by KONR on (22 Sep 2013)

Activation Photos 30Sep2011: Chuck N6UHB & Naomi KD0PNK C Submitted by N6UHB on (27 Jan 2012)

Pikes Peak - W0/FR-004 Submitted by KD9KC on (29 Nov 2011)

+Add new external link | +Add new article

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: 54

54 View All

Latest By:

N0TA on 04 Mar 2016

KG7KSA on 10 Oct 2015

N0KTK on 24 Sep 2015

NM5S on 19 Aug 2015

N0XDW on 02 Aug 2015

#### First Activated by:

NS0TA on 08 Aug 2011

### Activated by You on:

02 Jul 2013

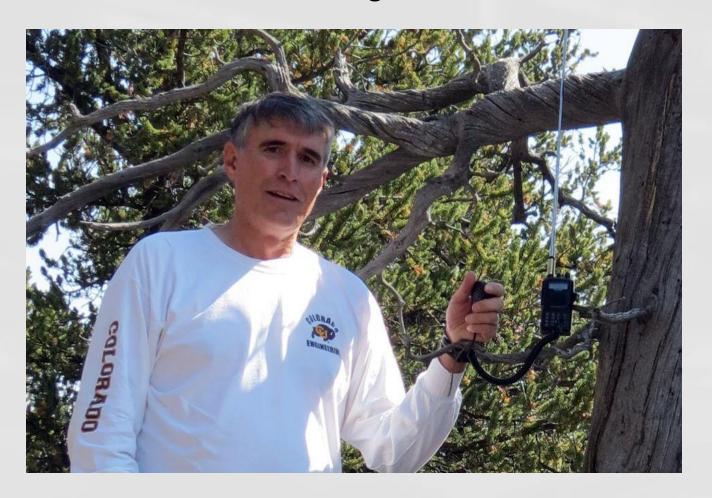
#### 896 QSOs on these bands:

40m	21	2%
30m	37	4%
20m	560	63%
17m	22	2%
15m	42	5%
12m	6	1%
10m	20	2%
10m 6m	20	2% <1%

# **Easy VHF SOTA Activation**

Also known as "take along a 2M handheld on a hike"





Kaufman Ridge HP (WØ/SP-081)

10,765 feet elevation



### The ½-wave Vertical Antenna

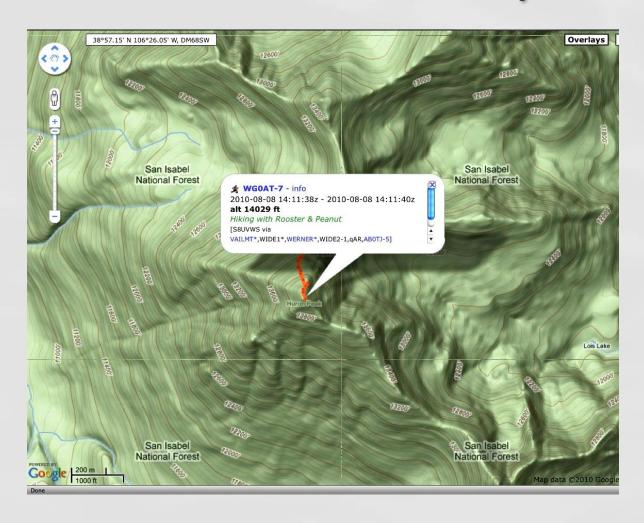


MFJ-1714 - SMA or BNC connector





# **APRS For Position Reporting**



Yaesu VX-8GR APRS handheld w/GPS





# Improved VHF SOTA Activation

Also known as "bring along a small 2-Meter Yagi antenna"



Aspen Ridge (WØC/SP-084)

10,740 feet elevation

Arrow 3-element Yagi for 2m



# Steve WGØAT on Handies Peak



Handies Peak ((WØ/SJ-001)

14,048 feet elevation





### HF or VHF?

### Take Your Pick, Or Do Both

### VHF/UHF

Height Above Average Terrain

Basic/compact equipment: Handheld Transceiver (HT)

Dependent on local chasers

FM most common, SSB for VHF contests

Technician Licensees can play

### HF

Classic QRP operating (CW and SSB)

Longer distance contacts

More radio contacts

Recommended: General License Class or higher



# **HF Transceivers**

ATS-3A CW Transceiver



Yaesu FT-817







Elecraft KX1

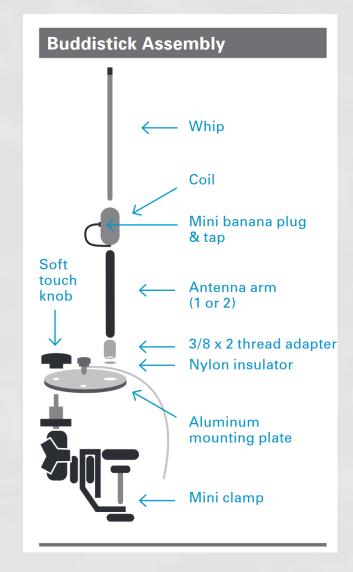


### **Buddistick Antenna**

Covers 40m through 10m Tunes via tapped coil Uses one radial as counterpoise



Deluxe package, \$175





### **EFHW Antenna**

**End-Fed Half-Wave Antenna** 

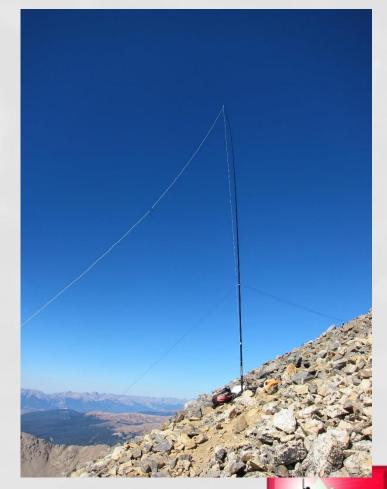
Kind of like a half-wave dipole but you can feed it from the end.





# No Trees: Wire Antenna on Fishing Pole





George KXØR





https://youtu.be/yUkM1uvWpxg



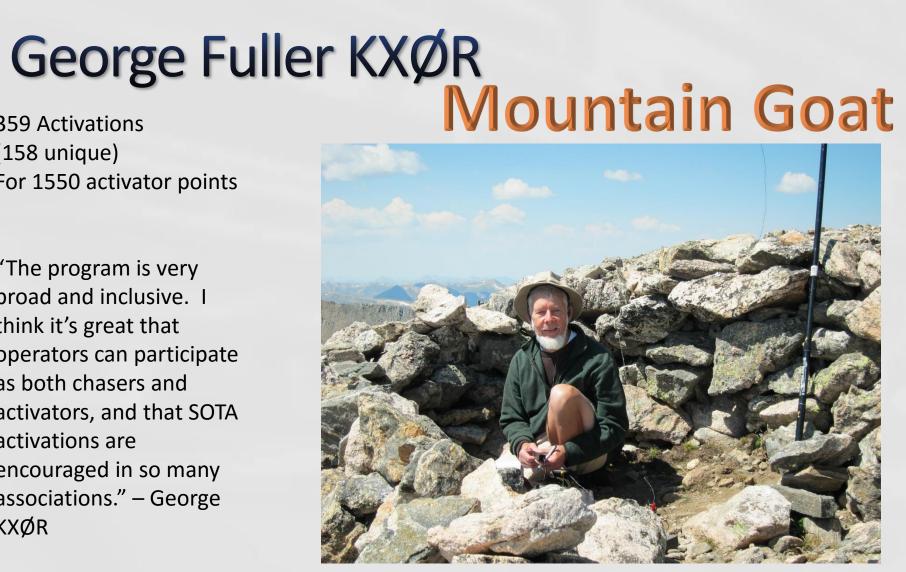
# WØC Activator Role of Honor

Position	Activator Callsign	Summits	Points	Seasonal Bonus	Total Score	Avg. points per Expedition	View Log
1	KXOR	359	1550	216	1766	4.92	View
2	KOMOS	207	1108	177	1285	6.21	View
3	W0CCA	137	1089	63	1152	8.41	View
4	KOJQZ	202	925	147	1072	5.31	<u>View</u>
5	KC0YQF	118	631	90	721	6.11	<u>View</u>
6	W0CP	90	526	63	589	6.54	<u>View</u>
7	WG0AT	116	463	96	559	4.82	<u>View</u>
8	WA6MM	59	492	45	537	9.10	<u>View</u>
9	N5XL	62	393	36	429	6.92	<u>View</u>
10	N0TA	84	342	60	402	4.79	<u>View</u>
11	N0BCB	74	324	33	357	4.82	<u>View</u>
12	N6UHB	48	268	57	325	6.77	<u>View</u>
13	AD0KE	45	239	51	290	6.44	<u>View</u>
14	KD0PNK	43	219	60	279	6.49	<u>View</u>
15	W0MNA	40	214	0	214	5.35	<u>View</u>
16	KONR	38	198	12	210	5.53	<u>View</u>
17	W0ERI	37	208	0	208	5.62	<u>View</u>
18	KD0YOB	29	127	12	139	4.79	<u>View</u>
19	KH7AL	28	98	9	107	3.82	<u>View</u>
20	K0FTC	22	87	3	90	4.09	<u>View</u>
21	KD2FPP	10	80	0	80	8.00	<u>View</u>
22	KI0G	20	61	12	73	3.65	<u>View</u>
23	KI6YMZ	5	50	6	56	11.20	<u>View</u>
24	W0ECE	8	49	0	49	6.13	<u>View</u>
25	KA0BV	5	44	0	44	8.80	<u>View</u>
26	AG5CQ	10	42	0	42	4.20	<u>View</u>
27	K0ZV	6	37	0	37	6.17	<u>View</u>
28	NK0E	7	36	0	36	5.14	<u>View</u>
29	N0XDW	5	35	0	35	7.00	<u>View</u>
30	N0YE	10	28	3	31	3.10	<u>View</u>
=30	KDOBIK	880 W	31	0	3/00	3.88	<u>View</u>
32	KF6LHX	5	28	0	28	5.60	<u>View</u>



359 Activations (158 unique) For 1550 activator points

"The program is very broad and inclusive. I think it's great that operators can participate as both chasers and activators, and that SOTA activations are encouraged in so many associations." - George KXØR



James Peak WØC/SR-031



# WØC Chaser Role of Honor

Position	Chaser Callsign	Activators Worked	Points	Avg. points per Expedition	View Log
1	W0MNA	10726	55289	5.15	<u>View</u>
2	W0ERI	8790	46301	5.27	<u>View</u>
3	KXOR	1335	6002	4.50	<u>View</u>
4	KI0G	1084	5932	5.47	<u>View</u>
5	N5XL	908	4690	5.17	<u>View</u>
6	WG0AT	583	3226	5.53	<u>View</u>
7	KOJQZ	588	3093	5.26	<u>View</u>
8	AC0A	447	2766	6.19	<u>View</u>
9	WB9WHQ	341	1817	5.33	<u>View</u>
10	W0CP	270	1418	5.25	<u>View</u>
11	N0TU	268	1401	5.23	<u>View</u>
12	NOTA	223	1203	5.39	<u>View</u>
13	KONO	219	1198	5.47	<u>View</u>
14	KIOSK	205	1160	5.66	<u>View</u>
15	KONR	167	937	5.61	<u>View</u>
16	AA0LV	132	817	6.19	<u>View</u>
17	W0EA	142	745	5.25	View
18	WA6MM	145	698	4.81	<u>View</u>
19	KOMOS	155	627	4.05	<u>View</u>
20	NU0T	70	441	6.30	<u>View</u>
21	KC0YQF	65	378	5.82	<u>View</u>
22	KD0YOB	64	303	4.73	<u>View</u>
23	NOBCB	63	299	4.75	<u>View</u>
24	NOXDW	57	276	4.84	<u>View</u>
25	WB9QDL	64	258	4.03	<u>View</u>
26	AD0KE	52	240	4.62	<u>View</u>
27	WA0KAQ	37	228	6.16	<u>View</u>
28	WB0PTD	34	214	6.29	View



Gary Auchard WØMNA

Worked 10726 activators for 55289 points

Achieved Shack Sloth (1000 pts) in 68 days.

"I guess the fun part for me has been working the weak signals...knowing there is a person on the other end that has gone to a lot of trouble to be there, and I want to be sure his trip is made worth his efforts and people appreciate them doing the activator part." – Gary WØMNA



# **Super Easy SOTA Summits**

Super Easy: easy access, less than 1 mile hike, less than 500 feet vertical

- Pikes Peak (W0C/FR-004) drive up
- Mt Evans (W0C/FR-003)- drive up then ¼ -mile, 130 feet vertical hike
- Trail Ridge (WOC/FR-123) 0.8 miles, 300 vertical feet
- Genesee Mountain (W0C/FR-194) drive up then 200 ft hike
- Chief Mountain (W0C/FR-030) 1 mile hike, 700 feet vertical
- Prospect Mountain (W0C/FR-069) take the tram, then 300 feet vertical
- Monarch Ridge South (WOC/SP-058) take the tram



# Summary, Q&A

### Great combination:

Hiking, Ham Radio and Colorado mountains

### Resources:

Colorado 14er Event ham14er.org August 6-7

Summits On The Air w0c-sota.org

SOTAwatch sotawatch.org

KØNR Website k0nr.com



Be safe and have fun!!!

This presentation is available for download at k0nr.com

