

Taking Your Radio for a Walk: Getting Started with Portable Ops

An Introduction to POTA & SOTA for
CARES

Sorin, KN6YUH
May 7, 2026



Acronyms used

- **Program Acronyms**

- POTA (Parks on the Air)
- SOTA (Summits on the Air)
- WWFF (World Wide Flora and Fauna)
- ARRL (American Radio Relay League)
- AZ (Activation Zone)

- **Operating Terms**

- CQ (Calling any station)
- QRZ (Ready for the next contact)
- QRM (Interference/Noise)
- QSOs (Radio contacts)
- Pileup (Multiple stations calling the same activator)
- Spotting (Announcing an activator's frequency and location)
- RST (Signal report)
- DX (Long-distance communication)
- QTH (Home location)

- **Modes and Power**

- CW (Morse Code)
- SSB (Single Sideband/Voice)
- FT8 (Digital Mode)
- QRP (Low Power, typically $\leq 5W$)

- **Gear and Technical Terms**

- EFHW (End-Fed Half-Wave antenna)
- Magloop (Magnetic Loop Antenna)
- LiFePO4 (Lithium Iron Phosphate battery)
- SLA (Sealed Lead Acid battery)
- RBN (Reverse Beacon Network)
- ADIF (Amateur Data Interchange Format)

- **Scoring and Event Terms**

- P2P (Park-to-Park contact)
- S2S (Summit-to-Summit contact)
- 2-fer (Activating two parks simultaneously)
- Activators/Chasers/Hunters

Who am I? (KN6YUH)

- Licensed in March 2023
- Cupertino ARES AEC
- Palo Alto Amateur Radio Association (PAARA) board member
- Member of the AARC



POTA vs. SOTA: The Big Picture

POTA (Parks on the Air):

- Accessible, "Picnic Table" friendly, high volume of contacts.



SOTA (Summits on the Air):

- Physical, weight-sensitive, "Peak-to-Peak" excitement.



History & Origins

Feature	SOTA	POTA
Launch Date	March 2, 2002	Early 2017
Origin Country	United Kingdom	United States
Preceding Program	European Adventure Radio	WWFF-KFF / ARRL NPOTA
Governing Structure	Co-operative Management Team	501(c)(3) Nonprofit
Expansion Focus	Topographic Prominence	Public Land Administration

Scoring & “The Hunt”

- **Activators:** You (the one in the field).
- **Chasers/Hunters:** Everyone else (the ones at home).
- **POTA:** 10 contacts for a valid activation.
- **SOTA:** 4 contacts for points (points based on summit height).

Contact and Scoring Metrics Comparison

Metric	POTA	SOTA
Activation Threshold	10 QSOs for validity	1 QSO for validity; 4 for points
Band Multipliers	Permitted for contact count	Prohibited for point credit
Point Weighting	Uniform (1 point per park)	Variable (1-10 based on height)
Same-Station Credit	Allowed across different bands	Forbidden (1 credit per station)
Vehicle Use	Permitted	Prohibited within the activation zone

Park-to-Park & Peak-to-Peak (P2P)

- **The “Holy Grail”:** Connecting with another person also “on a walk”
- **Why it’s fun:** It counts for both of you!

 Parks on the Air

Search for Callsigns & Parks

Active Spots Data will refresh in 47 seconds. ||

Band: All **112** Mode: All **112** Program: All **112** QRT: Hide **94** Hunted: Show **112** Sort: Time

 **W0WAL** @ **US-1210**

 US-1210 Boyd Lake State Park

 US-CO

 14080.0 kHz (FT4)

 K1RA-#

 RBN -1 dB via K1RA-#

 Last heard 8 sec ago at 20:25 UTC

RE-SPOT   5

 **AF0E** @ **US-0185**

 US-0185 Hugo State Wildlife Area

 US-CO

 14057.5 kHz (CW)

 VE6WZ-#

 RBN 15 dB 23 WPM via VE6WZ-#

 Last heard 10 sec ago at 20:25 UTC

RE-SPOT   8

 **WC1D** @ **US-0745**

 US-0745 Minute Man National Historical Park

 US-MA

 14039.9 kHz (CW)

 OK1HRA-#

 RBN 8 dB 23 WPM via OK1HRA-#

 Last heard 11 sec ago at 20:25 UTC

RE-SPOT   16

Popular Modes & The QRP Advantage

- **SSB (Voice):** Great for energy and emotion.
- **CW (Morse Code):** The king of SOTA; punches through with just 5 watts.
- **FT8 (Digital):** Perfect for “filling the log” in poor conditions.



Portable Power: The Battery Problem

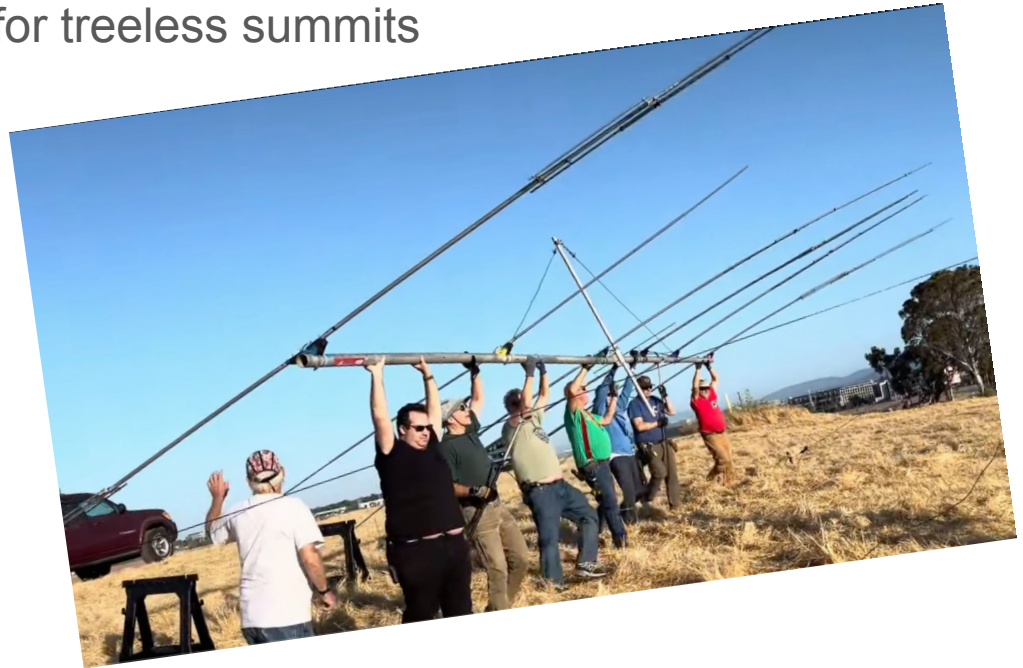
Capacity (Ah)	Typical Rig	Operating Time	Best Use Case
3Ah - 6Ah	HTs, QRP Rigs	2-4 hours	Long SOTA hikes
9Ah - 15Ah	10W Radios (IC-705)	3-6 hours	Moderate POTA/SOTA
20Ah - 30Ah	100W Radios (FT-891)	4-8 hours	Full POTA day
100Ah	Multi-op Station	Multi-day	Base camp/Emcomm

- SLA (Old Tech): Heavy, low capacity.
- LiFePO4 (The Standard): 4Ah for SOTA, 12Ah for POTA.
- Solar: When is it worth the weight?

A blue rectangular battery with a green label and red/black cables.	A blue rectangular battery with a green label and red/black cables.	A blue rectangular battery with a green label and red/black cables.	A blue rectangular battery with a green label and red/black cables.
12V 3Ah LFP Battery (PVC, BLF-1203W) From \$49.99	12V 3Ah LiFePO4 Battery - Bioenno Power BLF-1203AB From \$49.99	12V 4.5Ah LiFePO4 Battery - Bioenno Power BLF-12045W From \$64.99	12V 6Ah LiFePO4 Battery - Bioenno Power BLF-1206A From \$79.99
Choose options	Choose options	Sold out	Choose options

Antennas for the Field

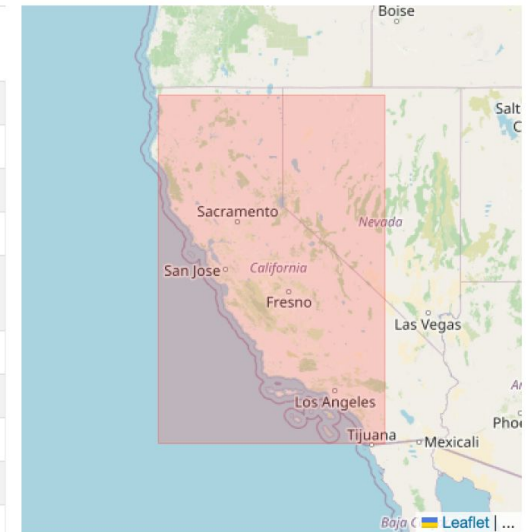
- **The EFHW (End-Fed Half-Wave):** Easy to deploy in trees (Portola Redwoods style)
- **The Vertical/Magloop:** Better for treeless summits (Black Mountain style)



The Activation Journey: Logistics

- Research: Use SOTA Maps or POTA.app.
- Preparation: Check weather and trail conditions.
- The Kit: Radio, Antenna, Battery, Log, Water, Snack (optional).

Code	Name	Alt (m)	Points	Total	My	My	
				Activations ▼	Activations	Chases	
W6/CC-045	Mount Diablo	1173	2	254	0	0	
W6/CC-002	Mount Pinos	2692	8	228	0	0	
W6/CC-072	San Bruno Mountain	401	1	207	1	0	 
W6/CC-003	Frazier Mountain	2442	8	189	0	0	
W6/CC-052	Mount Umunhum	1063	2	172	0	1	  
W6/CC-063	Mount Tamalpais	786	2	152	0	0	
W6/CC-014	Cuyamaca Peak	1985	6	131	0	0	
W6/CC-051	North Peak	1084	2	100	0	0	
W6/CC-039	Viejas Mountain	1276	4	84	0	0	
W6/CC-056	Sandstone Peak	948	2	81	0	0	



The Script: Calling CQ

- Is this frequency in use? This is KN6YUH.
- CQ CQ Parks On The Air, CQ Parks On The Air
- KN6YUH Kilo November Six Yankee Uniform Hotel
- Calling CQ Parks On The Air from US-1136 Castle Rock State Park in California.

The Script: Responding back

- **W66WW**

- W66WW, You're my first contact for today. I copy you 5-9 into US-1139.

- **KN6YUH, I have you 4-7 into Arizona. W66WW**

- W66WW, thank you for the Arizona and have a great day.
 - QRZ?
-
- Next call...

Managing the Pileup

- Listen for partials
- Keep calling QRZ after each contact
- Stay calm
- Call CQ again when you can't hear anybody else

Digital Activation & Spotting

- Spotting: If you're not on the map, you won't get caught!
- Tools: POTA/SOTA apps, SMS spotting (when cell signal is weak)

 **SOTAwatch3**

28 Mar 2026 **21:25 UTC** 14:25 local

[SOTA Links](#) [KN6YUH](#) 

[SPOTS](#) [ALERTS](#) [Reflector Posts](#) 

latest 50 spots  [+ Add Spot](#) 

21:22	KD7WPJ	146.580	FM	W6/CT-067	8	[KD7WPJ{NA}]: 2122	SMS		
21:20	K2CPT	144.200	SSB	W2/GA-464	1	QSY	K2CPT		
21:19	AF7JT	28.350	SSB	W7O/NC-032	1	Qsy	AF7JT		
21:19	AA0HC	146.520	FM	W0C/SP-096	4	New summit, with AE0YK	AA0HC		
21:18	KD7WPJ	144.100	CW	W6/CT-067	8	[KD7WPJ{NA}]: 2118	SMS		
21:17	AE7I	21.0589	CW	W6/NS-270	6	[RBNHole] at AC0C 26 WPM 17 dB SNR	RBNHOLE		>
21:12	K2CPT	21.350	SSB	W2/GA-464	1	QSY	K2CPT		

Field Logging Solutions

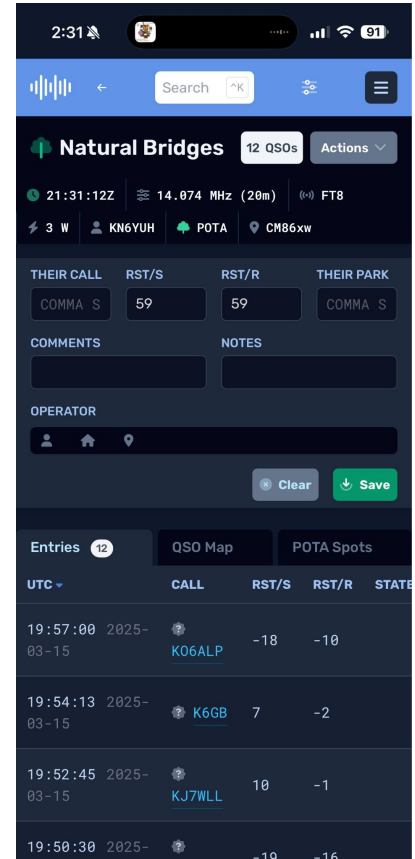
Paper Logging:

- Reliable
- No batteries required
- Pain to type later



HAMRS or Ham2K PoLo

- The gold standard for POTA



The Chaser Perspective

- **The role:** You are the “Hunter.”
- **How to be a good chaser:** Be brief, give clear signal reports, and don't QRM the activator.

“2-fers”

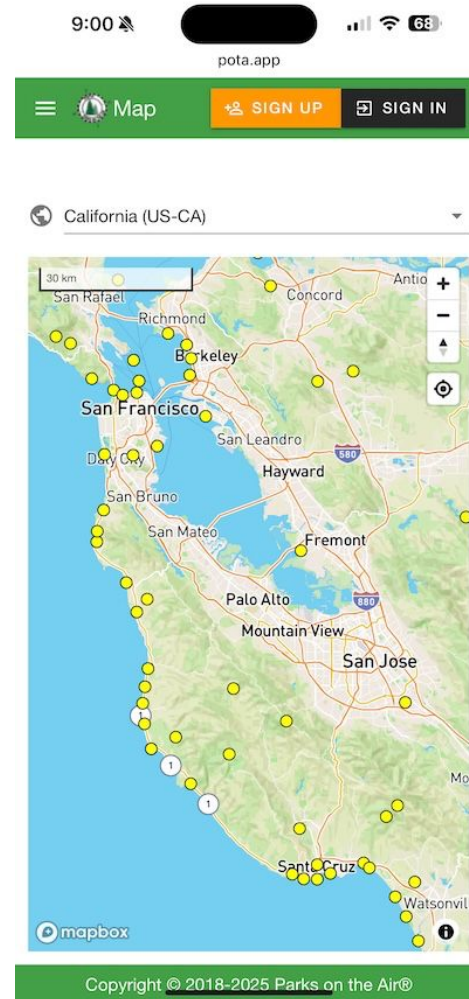
- **POTA entity types:** National Parks, Forests, Wildlife Refuges and trails.
- **Location:** Parks can be "2fer" or "3fer" based on geographical overlap (e.g., a state park within a national forest).

Multi-Park to Multi-Park Activations

If you are two-fer and working a three-fer activator, you generate two ADIF log files, each having three lines. The other activator generates three ADIF files, each having two lines. As a result, you will get 6 P2P credits, and the activator will also get 6 P2P credits from this contact.

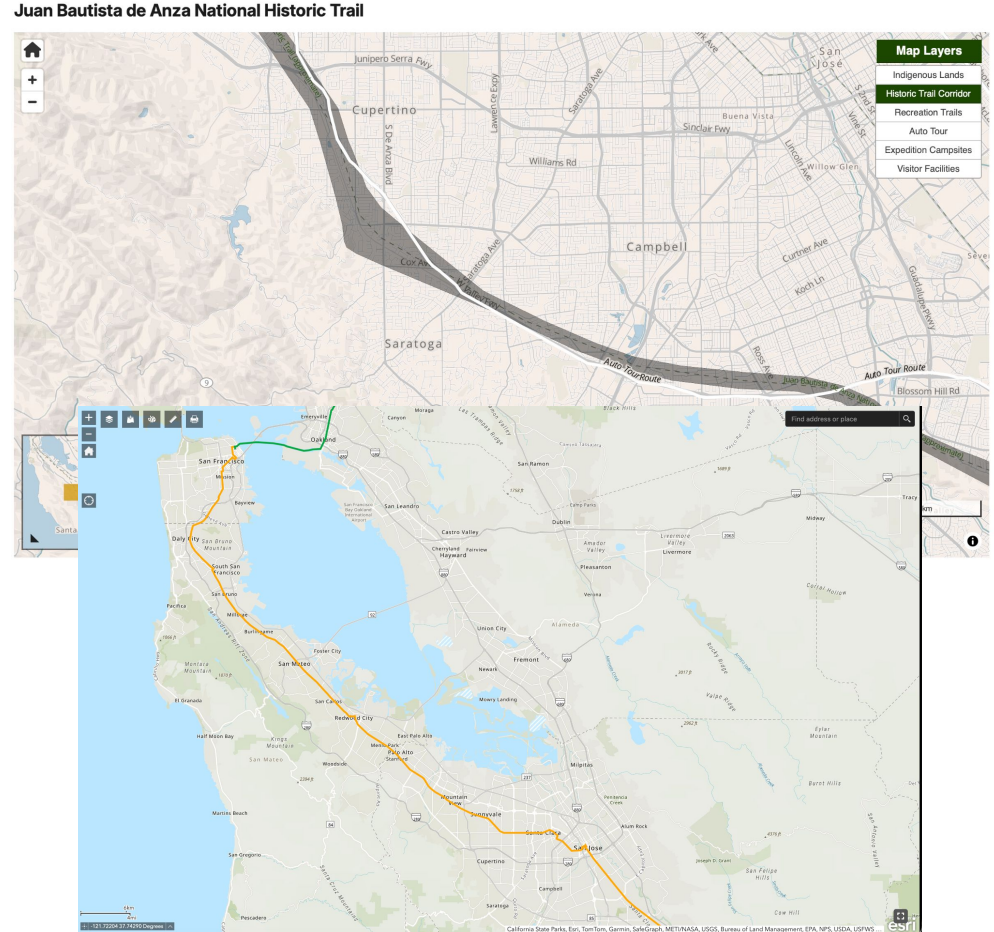
Nearby Locations: POTA

- Henry Coe (US-1161)
- Castle Rock (US-1136)
- Portola Redwoods (US-1187)
- Don Edwards (US-0189)
- Martial Cottle (US-3473)
- State Beaches along Highway 1



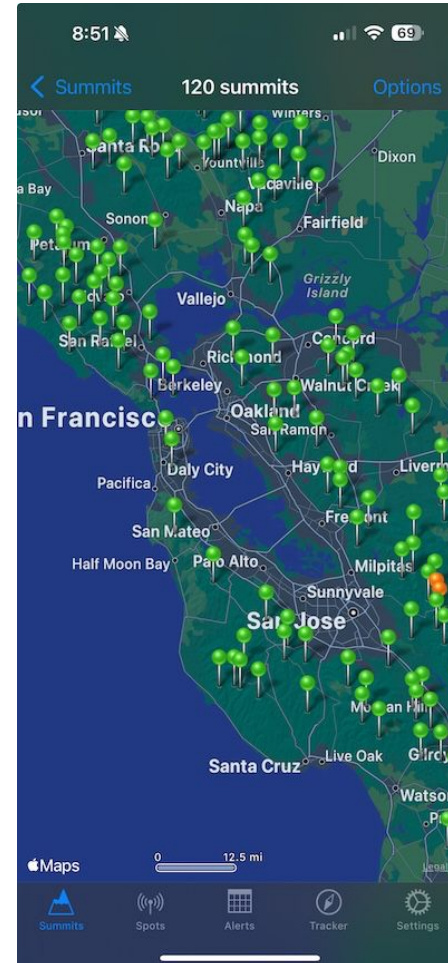
- Juan Bautista de Anza National Historic Trail (US-4571)
- Butterfield Overland National Historic Trail (US-9757)

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- Butterfield Overland National Historic Trail (US-9757)

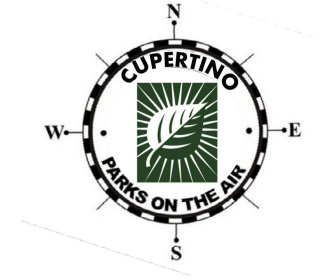


Nearby Locations: POTA

- Black Mountain W6/NC-049
- Mount Diablo W6/CC-045
- Mount Umunhum W6/CC-052



CPOTA: Cupertino Parks On The Air

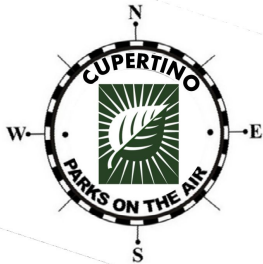


- Proposed by Jim KN6PE
- Presented in September 2024 at the CARES monthly meeting ([link](#))
- The purpose was to activate all the parks in Cupertino, with folks chasing/hunting from their home location
- The simplified signal reports help identify good (and bad) parks for future activations

COUNTA of Date	Park ID				
Activator	CUP11	CUP09	CUP12	CUP15	Grand Total
KR1JOE		24			24
N6TAE	17				17
KN6YUH			10		10
KN6GCC	9				9
KK6FPI				8	8
				0	0
Grand Total	26	24	10	8 0	68

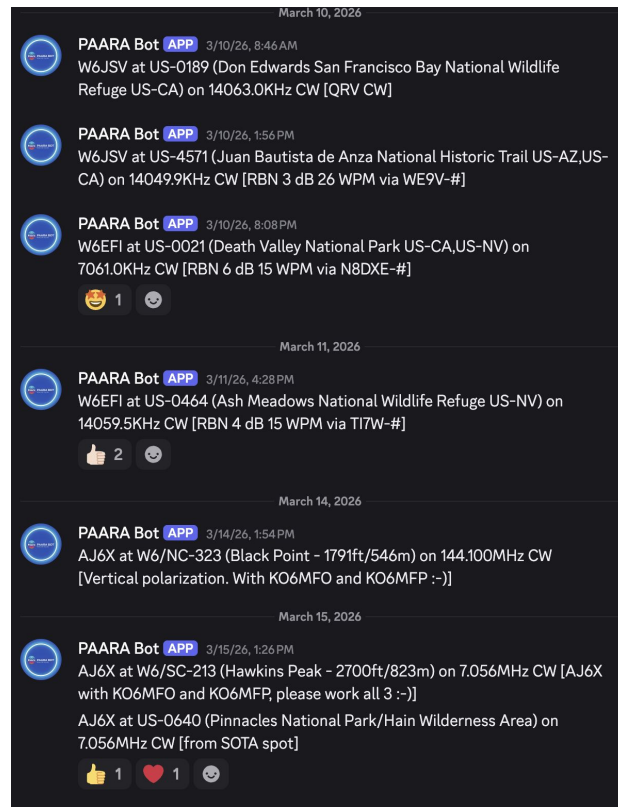
CPOTA 2026 Challenge (by the end of the year)

- 10 members have activated at least one park
- 1 member has activated at least 3 parks



The PAARA Discord Bot

- Tracks PAARA club members on POTA and SOTA
- Posts a notification on Discord when an activation is detected
- Other members might start chasing them, or get motivated to get out of their shack to activate a park or peak!



Resources

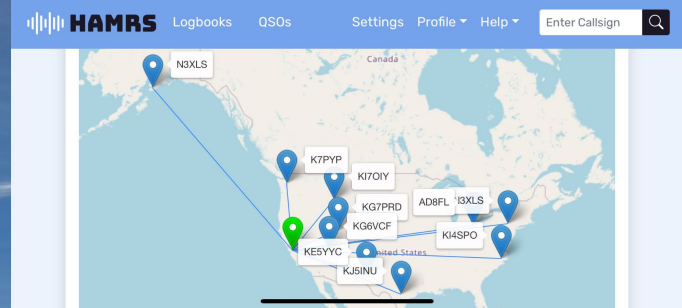
- [POTA.app](https://pota.app)
- [SOTA.org.uk](https://sota.org.uk)
- [HAMRS.app](https://hamrs.app)
- [SOTA Goat for IOS](https://sota-goat.com)
- POTA Maps (with SOTA Peaks): potamap.us
- KB9VBR's [Your first POTA ACTIVATION can be this EASY!](https://www.youtube.com/watch?v=...)



IC-705



Q&A



POTA Activations

My Activations

Search for Callsigns & Parks

SPOTS

ACTIVATIONS

DOCS

KN6YUH

Date Range

Search

Date	Callsign	Park	Location	CW	Data	Phone	Total	
2026-01-11	KN6YUH	US-0189 Don Edwards San Francisco Bay National Wildlife Refuge	US-CA	0	5	1	6	VIEW
2025-11-10	KN6YUH	US-4571 Juan Bautista de Anza National Historic Trail	US-CA	0	1	0	1	VIEW
2025-11-09	KN6YUH	US-4571 Juan Bautista de Anza National Historic Trail	US-CA	0	0	14	14	VIEW
2025-08-02	KN6YUH	US-1196 San Bruno Mountain State Park	US-CA	0	0	19	19	VIEW
2025-04-06	KN6YUH	US-1136 Castle Rock State Park	US-CA	0	8	2	10	VIEW
2025-03-23	KN6YUH	US-1136 Castle Rock State Park	US-CA	0	0	3	3	VIEW
2025-03-15	KN6YUH	US-3482 Natural Bridges State Beach	US-CA	0	10	2	12	VIEW
2025-02-18	KN6YUH	US-4458 Lake Tahoe Basin Management Unit National Forest	US-CA	0	0	10	10	VIEW
2025-02-17	KN6YUH	US-2638 Van Sickle Bi State Park	US-NV	0	0	14	14	VIEW
2025-01-05	KN6YUH	US-1161 Henry W. Coe State Park	US-CA	0	0	14	14	VIEW
2024-07-21	KN6YUH	US-0071 Yosemite National Park	US-CA	0	1	0	1	VIEW
2024-07-06	KN6YUH	US-1187 Portola Redwoods State Park	US-CA	0	0	10	10	VIEW
2024-05-25	KN6YUH	US-1161 Henry W. Coe State Park	US-CA	0	0	11	11	VIEW

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SOTA Activations



SOTA Results and Summits Database

KN6YUH 

[KN6YUH](#) [Logs](#) [Honour Rolls](#) [Summits](#) [Uploads](#) [Statistics](#) [Challenges](#)

Logs

KN6YUH

- Activator
- Chaser
- S2S
- Completes
- Activator Uniques
- Chaser Uniques
- SWL

Latest activations

Date	Summit	Points	Bonus Points		
02-Aug-2025	W6/CC-072 (San Bruno Mountain)	1	0		
26-Apr-2025	W6/NC-150 (Black Mountain)	2	0		

See all...

Latest chases

Date	Time	Other Callsign	Summit	Band	Mode
15-Mar-2026	18:51	NN6U	W6/NC-209 (Sierra Morena)	144MHz	FM
15-Nov-2025	19:50	KC8YEK	W6/CC-052 (Mount Umunhum)	144MHz	FM
02-Aug-2025	17:56	K6EL	W6/NC-298 (Vollmer Peak)	144MHz	FM
02-Aug-2025	17:45	KC8YEK	W6/NC-150 (Black Mountain)	144MHz	FM

See all...

Thank you!