

Port City Amateur Radio Club

April 1, 2026

**PortCityARC@groups.io – Main
Communications Channel**

www.W1WQM.org

**Sunday 10 AM Seacoast Net – 3895
kHz – General Discussion Rounds**

**Sunday 7 PM 2 M Net – W1WQM
Repeater – New Ham Comms**



Please Set Cell
Phones to Silent



Main Topic
Mesh Networks
by Jonathan, KC1BOS

Meshtastic and Meshcore

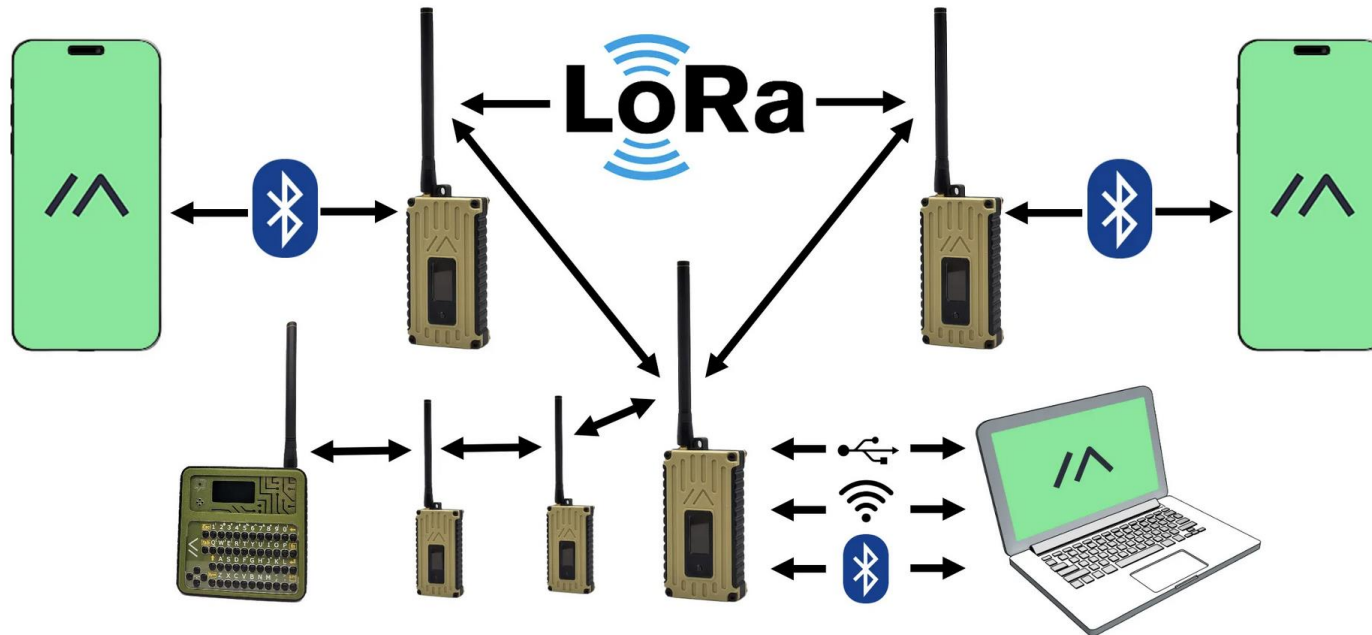
Who am I?

- Jonathan Wilson
- KC1BOS
- kc1bos@npkr.org
- 603 767 4254 (text preferred)
- Find me on discord: ivmden
- Find me on the mesh: ivmden

But What Does It Do?

Introduction

Meshtastic® is a project that enables you to use inexpensive LoRa radios as a long range off-grid communication platform in areas without existing or reliable communications infrastructure. This project is 100% community driven and open source!



<https://meshtastic.org/docs/introduction/>

What can I do with it?

- Texting
- Sensor and Telemetry data
- GPS location reporting
- Encryption!
- It feels like a modernized non-ham version of APRS

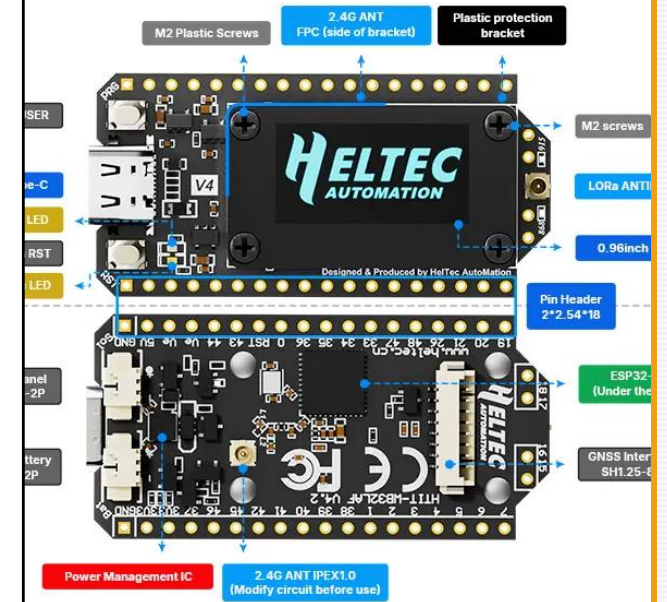
The What: Hardware

- 900 MHz radios
- ISM Band Unlicensed (Industrial, Scientific, Medical)
 - 1 watt max tx power
- Built on top of the LoRa protocol (Long Range)

The What: More Hardware

- LILYGO® T-Deck
 - \$80-100
- Heltec V4
 - \$30 on amazon
- RAK Wisblock Series
 - \$30-35 on amazon
- Seeed Studio Sensecap T1000-E
 - \$50 on amazon
- Many more options

<https://meshtastic.org/docs/hardware/>



RAK19007 - RAK Wireless Voltage & Connectors

Solar/USB

Max voltage input: 5.5V

Absolute max input is 7V. Do not exceed! 6-6.5V is considered a realistic max.

Min voltage input: 4.4V

Charging a battery requires 4.4V minimum. If not charging, minimum input is 4V.

USB-C has the same voltage specs as Solar input.

Solar Connector JST ZHR-2
1.5mm pin pitch



Battery

Lipo Chemistry Only
3.7V nom. / 4.2V charge

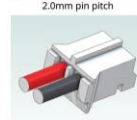
Max charge rate: 350mA

Max voltage input: 4.3v

Min voltage input: 3.3v

(recommended by RAK)
3v is considered a realistic minimum that still provides full functionality.

Battery Connector JST PHR-2
2.0mm pin pitch



Always check battery connector polarity before plugging in!



The What: Software

- Two (incompatible) protocols: Meshtastic and Meshcore.
 - Meshtastic is older and a little more mature
 - Meshcore is younger but better designed for meshed communications.
 - Both protocols use the same hardware.
- NH is primarily Meshtastic using the LongFast protocol with plans to migrate to MediumFast.
- Boston and Greater Boston are largely Meshcore using the US Defaults.
- A lot of NHMesh users are making a strong push towards Meshcore on US Defaults.

Meshtastic vs Meshcore

What	Meshtastic	Meshcore
Age	Older	Younger
Local Coverage	Strong	Growing
Useability	Good	Growing
Sensor Support	Good	Weak
iPhone Support	iOS 17.5 and newer	iOS 12.0 and newer*
Android Support	Android 8.0 and newer	Android 5.0 and newer*
Max Hops	7	64
Message Delivery	Fair	Good

*Meshcore mobile apps are closed source

Helpful Links

- Meshtastic Documentation: <https://meshtastic.org/docs>
- Meshcore: <https://meshcore.co.uk/>
- NHMesh: <https://nhmesh.com/>
- NHMesh live map: <https://nhmesh.live/>
- NHMesh Discord: <https://discord.com/invite/8Axx3rdgDD>
- TonyG on Printables: <https://www.printables.com/@TonyG>
- AlleyCat on Printables: <https://www.printables.com/@AlleyCat>

Questions?

Officers & Members Introduction

- **Mark – K1RX – President, Trustee NM1JY**
- **Thom - K1TKT - Vice President**
- **Bonnie - N1IIM - Treasurer**
- **Mark – KC1UKO – Secretary**
- **Ken – N1RP – Trustee, W1WQM**

- **NEW VISITORS**
- **Around the room introductions with your:**
 - **Name**
 - **Call (use phonetics)**
 - **Home Location**
 - **Club Office Held (if any)**



Coming Up Tonight

- **Donation Dinner – Turkey Tacos – (You're welcome)**
- **Main Topic – Mesh Networks – Jonathan KC1BOS**
- **Announcements**
- **Club Calendar**
- **Treasurer's Report**
- **Old Business**
- **New Business**
- **Seacoast Flea Market – KC1ILT**
- **Lightning Rounds**
- **Intermission – 50/50 Tickets on Sale!**
- **Lightning Rounds**
- **50/50 Drawing**
- **Motion to Adjourn**



Announcements

- **Member License Upgrades**

Coming Up Soon – Club Calendar

- **VE Test session – April 11 at Flea Market**
- **ARES**
- **POTA Activity**
- **Lab Night – TBD**

Old Business

Searching for a New Treasurer – Nominations Open

Special Services Club – Update

Portsmouth Market Square Day - update



New Business

Field Day Apparel – AA1IT

Any other NEW Business?



Reminder

Seacoast Flea Market – Saturday, April 11

- Spring Clean Out Opportunity
- Open to public at 8 AM
- Setup (Kitchen, Indoor Tables, PA) starts at 6:30 AM
- Entrance fee \$5.00 (door prize ticket, NO limit)
- Indoor and Outdoor areas
- 50/50 Drawing every hour
- Hourly Door Prize Drawings
- Where? St. James Lodge 77 Tide Mill Road, Hampton

- VE Session following clean up starts at 1 PM

- <https://w1wqm.org/wp-content/uploads/2026/02/2026-FLEA-MARKET-FLYER.pdf>

Lightning Rounds

Club Project RAS-4

Kirby, KC1RWR & Devon, KC1SDD

Lightning Rounds

20 M Reversible Yagi

Kirby, KC1RWR & Devon, KC1SDD

Lightning Rounds

Fox Hunting
Adam, KC1RXA

Radio Direction Finding
AKA
Fox Hunting

For those
who don't
know what
fox hunting
is.

This is a Fox.

This is what it sounds like.

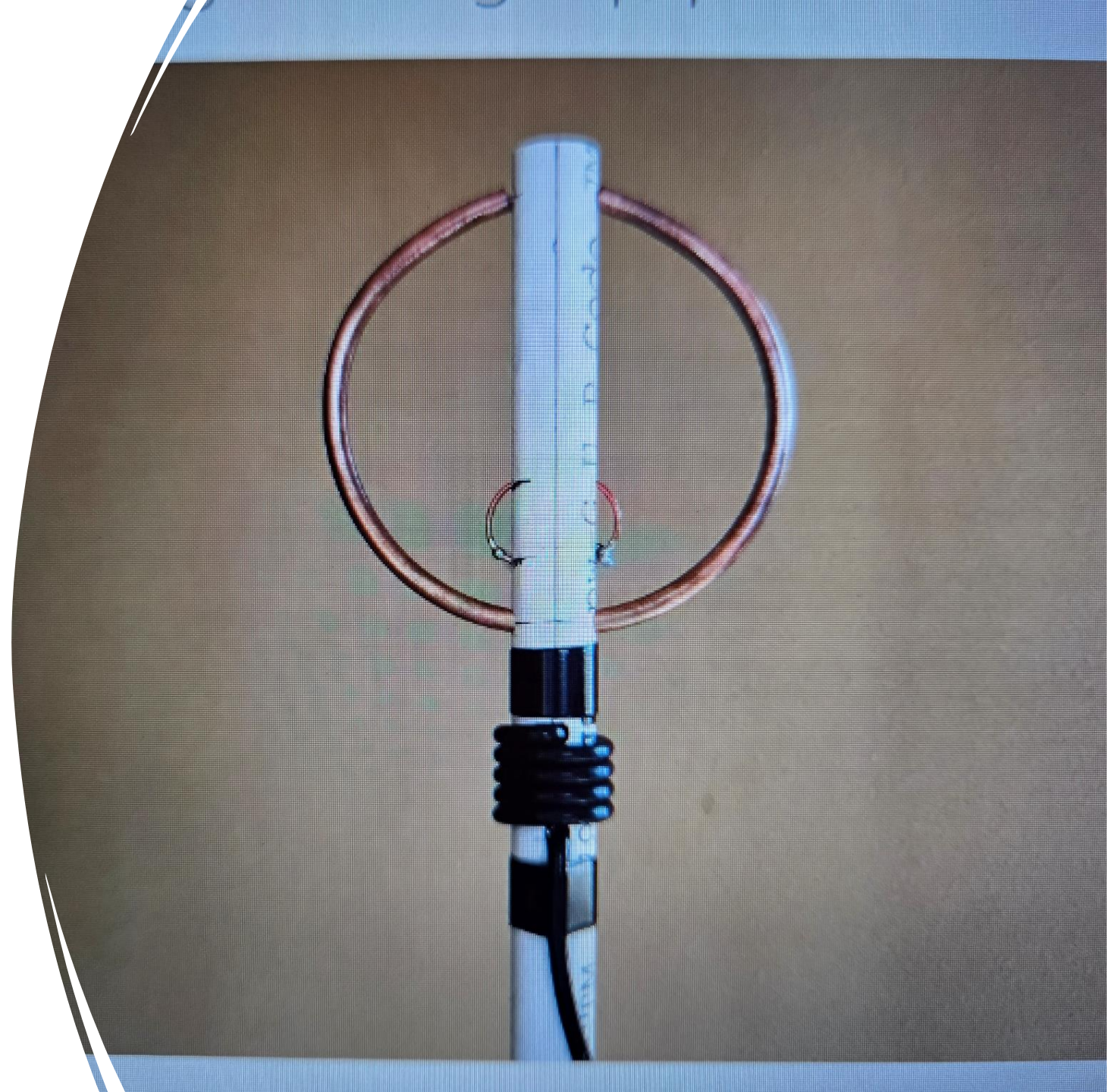


Who remembers these?



SO, who's interested in some fox hunting?

- To prepare we can do a lab night to build YAGI's
- Or possibly some Loop antennas
- Or even some attenuators



My hope is to make this a regular thing.

And to make it more interesting.

How would everyone feel about having a small players fee and winner takes all?

I'll start a thread on Groups I.O.
for those interested

- So, lets have some fun and friendship.
 - Let's make some cool stuff.
- And make people go "What are they doing with those weird things?"
- Another thought behind this is to attract new hams to the hobby.

IT'S INTERMISSION TIME!



Visit Our

Snack Bar!!

Buy your 50/50 Tickets
Return in 20 Minutes

Lightning Rounds
Contests
Mark, KC1UKO

April Contests

April 29 thru May 5 – WAS 250 W1AW/1 NH

ARRL Rookie Roundup SSB 18Z to 2359Z Apr 19 (licensed less than 3 yrs)

State/Province QSO

Louisiana	14Z Apr 4 to 02Z Apr 5
Mississippi	14Z Apr 4 to 02Z Apr 5
New Mexico	14Z Apr 11 to 02Z Apr 12
Missouri	14Z Apr 11 to 04Z Apr 12 and 14Z to 20Z Apr 12
Georgia	18Z Apr 11 to 0359Z Apr 12 and 14Z to 2359Z Apr 12
North Dakota	18Z Apr 11 to 18Z Apr 12
Michigan	16Z Apr 18 to 04Z Apr 19
Ontario	18Z Apr 18 to 03Z Apr 19 and 12Z to 20Z Apr 19
Quebec	13Z to 24Z Apr 19

May Contests

7th Area Call Area

13Z May 2 to 07Z May 3

- Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming

New England (CT, ME, MA, NH, RI, VT) 20Z May 2 to 05Z May 3 and 13Z to 24Z May 4

Follows NEARfest

Indiana

15Z May 2 to 03Z May 3

Delaware

17Z May 2 to 2359Z May 3

State Parks on the Air

FL 12Z to 2359Z Apr 17, 18, 19, and 20

TX 00Z Apr 18 to 2359Z Apr 19

GA 12Z APR 18 to 2359Z Apr 19

Lightning Rounds
Thom, K1TKT









-POTA is not a points contest

-Our club can work toward Awards

-W1WQM already has earned some awards >>>>

Earned Awards

 Search

Date First Granted	Award Name	Description	Badge	Endorsements
2025-09-21 23:20	Arizona Agave Hunter 	Working 100 different units		PHONE
2025-01-31 00:47	Sapphire Hunter 	Working 75 different units		PHONE
2025-01-27 01:20	Diamond Hunter 	Working 50 different units		20M, PHONE
2025-01-26 14:40	Platinum Hunter 	Working 40 different units		20M, PHONE
2024-09-23 04:00	Gold Hunter 	Working 30 different units		15M, 20M, PHONE
2024-07-28 15:04	Bronze Hunter 	Working 10 different units		10M, 15M, 20M, 40M, PHONE
2024-07-28 15:04	Silver Hunter 	Working 20 different units		15M, 20M, PHONE
2024-07-20 18:08	Support Your Parks Hunter	Making Any Contacts as a Hunter During a Support Your Parks Event		Summer 2024 

W1WQM work toward Kilo Award for Hampton Beach Park

-WFD head start!
-Operators get individual credit, too.

Kilo

Park

Hampton Beach State Park (US-2656)

Have 1000 total contacts from a single park as an activator.

Hampton Beach State Park	
Reference:	US-2656
Entity:	United States of America
Location(s):	US-NH
Latitude / Longitude:	42.8987, -70.8125 (FN42ov)
Early Shift Award Times:	7:00 UTC to 13:00 UTC
Late Shift Award Times:	23:00 UTC to 7:00 UTC
Website:	https://www.google.com/search?client=safari&rls=en...
Access Methods:	Automobile Foot
Activation Methods:	Automobile Campground Pedestrian
Is Active?	ACTIVE
First Activation:	W2NR on 2018-09-23
Stats:	248 activations / 262 attempts (16131 QSOs)

Park Leaders

	Activations	Activator QSOs	Hunter QSOs
1.	K1KL 100	K1KL 10415	K9ICP 53
2.	KC1RLS 85	KC1RLS 3815	K4CAE 40
3.	W1WCI 3	W1WQM 293	AA5HH 32



Activations

Date	Callsign	CW	Data	Phone	Total
2026-01-30	K1TH	23	0	0	23
2026-01-24	AA1IT	0	0	9	9
2026-01-24	KL0D	9	0	0	9
2026-01-24	KC1UKO	0	0	51	51
2026-01-24	K1TKT	0	0	142	142
2026-01-24	W1ENR	0	0	68	68
2026-01-24	W1WQM	9	0	284	293
2025-12-17	W1WCI	0	6	5	11
2025-11-24	K1TKT	0	0	42	42
2025-09-27	KC1VAS	10	0	0	10



Hampton Beach W1WQM POTA Picnics – A new way for our members to meet & play radio

- *1st Wednesdays, noon (?)*
- Open invitation
- Bring your gear or a GOTA Box
- Bring your food and beverages
- Operate under W1WQM Call sign
- Game day decisions on frequencies and modes
- Meet in parking area
- Kids, pets, family friendly

QRZ Pages Display W1WQM POTA Activity



2009 ARRL Field Day K1R




Parks On The Air


Here you can view POTA statistics for club activities.



W1WQM Parks on the Air (POTA) Activity




W1WQM
Port City Amateur Radio Club




ACTIVATOR STATS		
Activations	Parks	QSOs
1	1	293

HUNTER STATS	
Parks	QSOs
117	141

View full stats - Powered by WD4DAN - Get yours!



W1WQM
Port City Amateur Radio Club



ACTIVATOR STATS							
Activations		Parks		QSOs			
1		1		293			

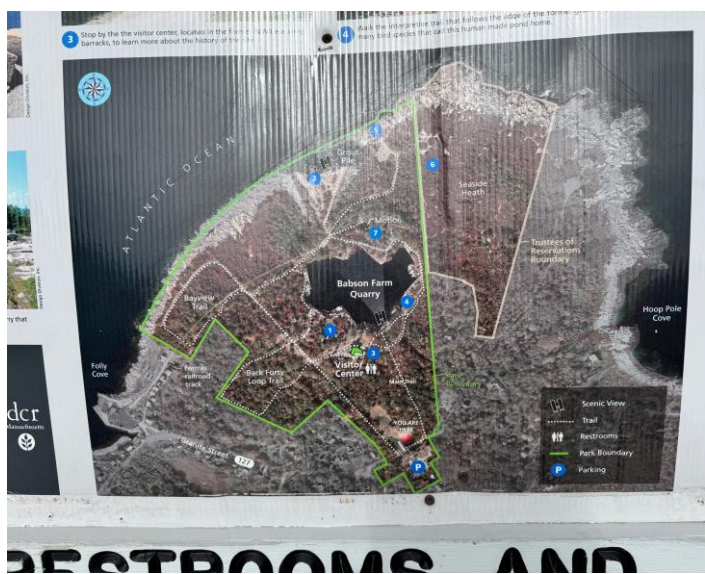
RECENT ACTIVATIONS							
Date	Ref	Loc	Park Name	CW	Data	Phone	Total
2026-01-24	US-2656	US-NH	Hampton Beach State Park	9	0	284	293

HUNTER STATS	
Parks	QSOs
118	142

RECENT HUNTER QSOs							
Date	Callsign	Ref	Loc	Park Name	Band	Mode	
2026-03-28	AC1RH	US-4757	US-MA	Georgetown Rowley State Forest...	17M	PHONE	
2026-01-24	W9BCM	US-2265	US-IN	Potato Creek State Park	20M	PHONE	
2026-01-24	KC0QNA	US-2479	US-MN	Flandrau State Park	20M	PHONE	
2026-01-24	VA3GHB	CA-5560	CA-ON	West Duffins Headwaters Conser...	20M	PHONE	
2026-01-24	VA3GHB	CA-6211	CA-ON	Oak Ridges Moraine National Re...	20M	PHONE	
2026-01-24	VA3GHB	CA-5082	CA-ON	The Trans Canada Trail Nationa...	20M	PHONE	
2026-01-24	K6LS	US-8340	US-FL	Canaveral Marshes State Conser...	15M	PHONE	
2026-01-24	KJ5BIN	US-0656	US-DC	Rock Creek Park	20M	PHONE	
2025-09-21	KG7MAV	US-9980	US-OR	Willamette River Greenway and ...	15M	PHONE	
2025-09-21	KG7MAV	US-3424	US-OR	Ice Age Floods National Geolog...	15M	PHONE	

AWARDS: 8			ENDORSEMENTS: 18		
Granted Date	Name	Endorsements			
2025-09-21	Arizona Agave Hunter	PHONE			

Come now,
and let us
activate



An aerial photograph showing a white pickup truck with a large lattice tower structure mounted on its bed. The truck is parked on a grassy area. To its right is a white sedan. The scene is overlaid with a grid of thin lines, possibly representing a drawing or a technical diagram. The text "50/50 Drawing" is written in yellow on the left side of the image.

50/50 Drawing

Motion to Adjourn

A solid green horizontal bar located at the bottom of the image.