

Hawaii Emergency Amateur Radio Digital Network (HEARDn) Summary

Mission: To provide emergency broadcasting via digital radio airwaves.

Category: Community Support Services

Contact: Michael Miller, President & CEO

Address: 44-096 Keaalau Place, Kaneohe, HI 96744

Grant History:

2023: \$20,639

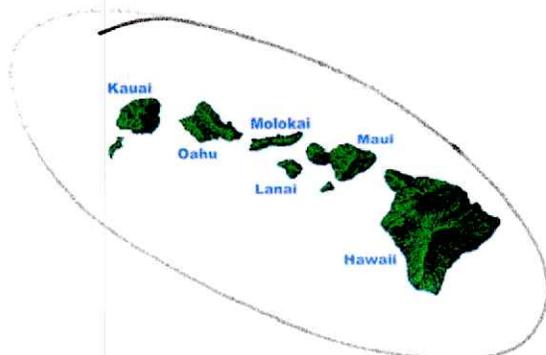
2025: \$18,900

TOTAL GRANTS TO DATE: \$39,539

2026 Request: \$75,215 for general operating support
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Notes:

- HEARDn consists of eight amateur radio stations offering daily and emergency communication services to Oahu, other islands, and boaters.
 - Internet, cell, and landline service is not reliable, especially during natural disasters.
 - Radio frequency is a more reliable source of communication.
 - Communicates with government, emergency responders, and citizens to provide messages, mapping, data files, etc. necessary for safety and evacuations.
 - Mostly self-funded ham radio operation with limited resources.
 - 2023 grant: \$20,639 for solar battery conversion.
- 2025: Solar batteries procured.
- Geographic Information Systems mapping and decentralized emergency networking project will provide specialized equipment and training to promote emergency digital networks for transmitting information during emergency situations.
 - Request will fund 100 units of specialized equipment. HEARDn will configure, train, and simulate scenarios to ensure emergency readiness of volunteer ham operators.
- 2026: Aging equipment needs replacement; expanding network; and conducting community-inclusive emergency communication training.
- Meshtastic is a low-power technology allowing non-FCC-licensed community members to participate in emergency communications with texts, status updates, and location information. No commercial infrastructure required.
 - Will expand Hawaii's emergency communications capacity.
 - Detailed budget provided.



GRANT REQUEST

Upgrades and Expansion Emergency Networking Project

Submitted to the Lawrence H. Dorcy Hawaiian Foundation

January 2026

Hawai'i Emergency Amateur Radio Digital Network, Inc. (HEARDn, Inc.)

Aloha Ms. Cownie,

On behalf of Hawai'i Emergency Amateur Radio Digital Network, Inc. (HEARDn, Inc.), we respectfully submit this grant request to support the continued upgrade and expansion of emergency communications across the State of Hawai'i. Previous funding from the Lawrence H. Dorcy Hawaiian Foundation has been instrumental in strengthening statewide emergency communications, bringing HEARDn close to true statewide coverage.

This request seeks to build upon that success by replacing aging infrastructure, expanding coverage, and increasing community participation before, during, and after emergencies—particularly when commercial power, cellular, and internet services are unavailable. Please see the current sites in operation below Winlink VHF GATEWAYS

Organization Overview

Hawai'i Emergency Amateur Radio Digital Network, Inc. (HEARDn, Inc.) is a Hawai'i-based nonprofit organization dedicated to providing resilient, independent emergency communications using licensed amateur radio systems, GIS mapping, and decentralized digital networking.

HEARDn now also incorporates Meshtastic, a low-power, open-source mesh networking technology that allows non-FCC-licensed community members to participate in emergency communications by sending low-bandwidth messages such as text, status updates, and location information. Each device also acts as a relay, passing messages across the network without reliance on commercial infrastructure. Please see the Meshtastic Activity Map on Jan 30, 2026 bellow-

Funding Request Overview

HEARDn, Inc. is requesting \$75,215 to support equipment replacement, network expansion, and community-inclusive emergency communications training statewide. Many of HEARDn's systems operate 24/7/365 at no cost to the community and require periodic replacement and modernization to maintain reliability. Final equipment selections and quantities may be adjusted based on availability, operational needs, and volunteer participation, while maintaining the project's objectives. A detailed budget and justification are provided in Appendix A.

Project Impact

- Expands Hawai'i's emergency communications capacity using independent, off-grid systems
- Enables community participation, including non-licensed volunteers
- Improves inter-island coordination and situational awareness
- Strengthens statewide disaster preparedness and resilience

Primary Point of Contact

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Mahalo,
Michael C. Miller (KH6ML)
President, HEARDn, Inc.

Appendix A – Budget & Equipment Summary

Category	Item	Quantity	Unit Cost (USD)	Line Total (USD)	Why It Matters
Mesh / Data Network	Solar-powered mesh peak relay nodes	100	\$155	\$15,500	Provides off-grid backbone for community emergency messaging
Mesh / Data Network	Mounting & installation hardware kits	100	\$48	\$4,800	Ensures long-term survivability of outdoor nodes
Mesh / Data Network	Portable mesh nodes	250	\$65	\$16,250	Allows non-licensed community members to send emergency messages

Mesh / Data Network	Backbone / linking data devices	1	\$600	\$600	Connects mesh segments and supports GIS/data aggregation
HF Communications	Complete HF radio systems	7	\$1,500	\$10,500	Enables inter-island and long-haul emergency communications
HF Communications	HF antenna systems	7	\$500	\$3,500	Required for reliable long-distance HF operation
VHF Communications	VHF radios	15	\$680	\$10,200	Primary radios for Winlink email and local coordination
VHF Communications	Gateway computers	15	\$279	\$4,185	Runs Winlink and digital messaging services
VHF Communications	Digital interfaces / sound cards	15	\$180	\$2,700	Enables digital radio modes such as VARA FM
VHF Communications	Power supplies & cabling	7	\$320	\$2,240	Ensures reliable, continuous gateway operation
VHF Communications	VHF antenna systems with cabling	7	\$320	\$2,240	Provides dependable local VHF coverage
Additional Costs	Inter-island shipping & setup	1	\$2,000	\$2,000	Supports equitable deployment across all islands

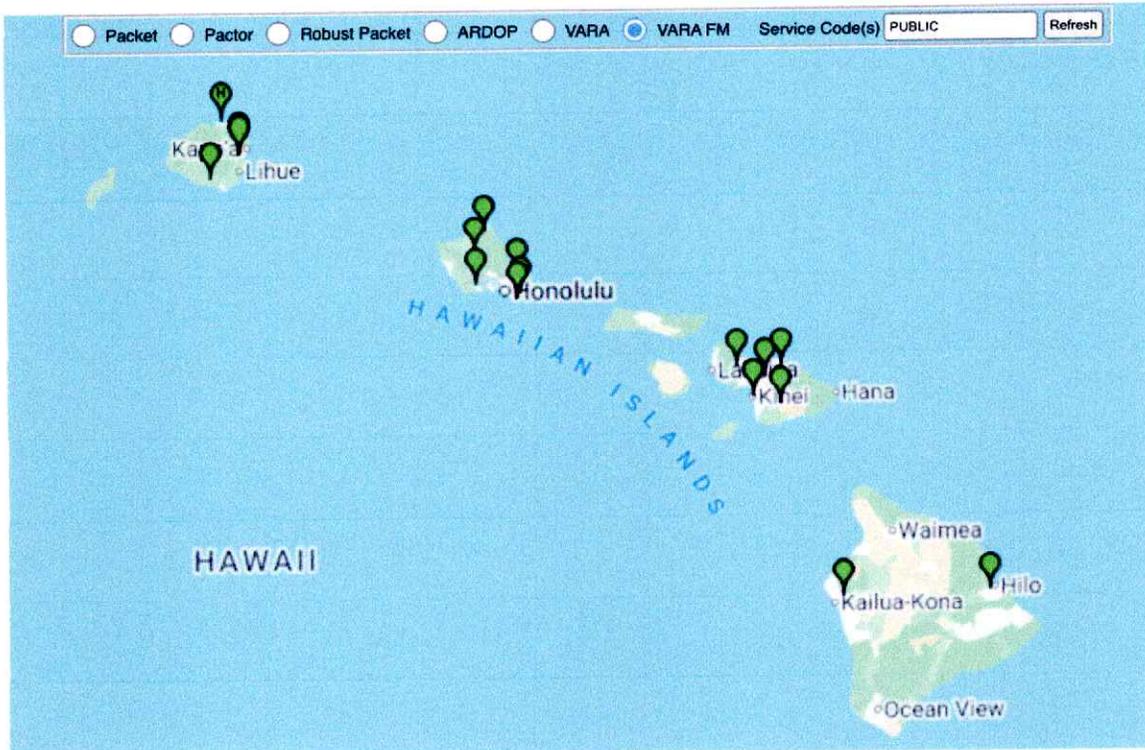
Additional Costs	Training materials & support equipment	1	\$500	\$500	Ensures effective operator and community training
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TOTAL **\$75,215**

Meshtastic Activity Map on Jan 30, 2026 -



Winlink VHF GATEWAYS as of Jan 30, 2026



Winlink HF Gateways as of Jan 30, 2026

