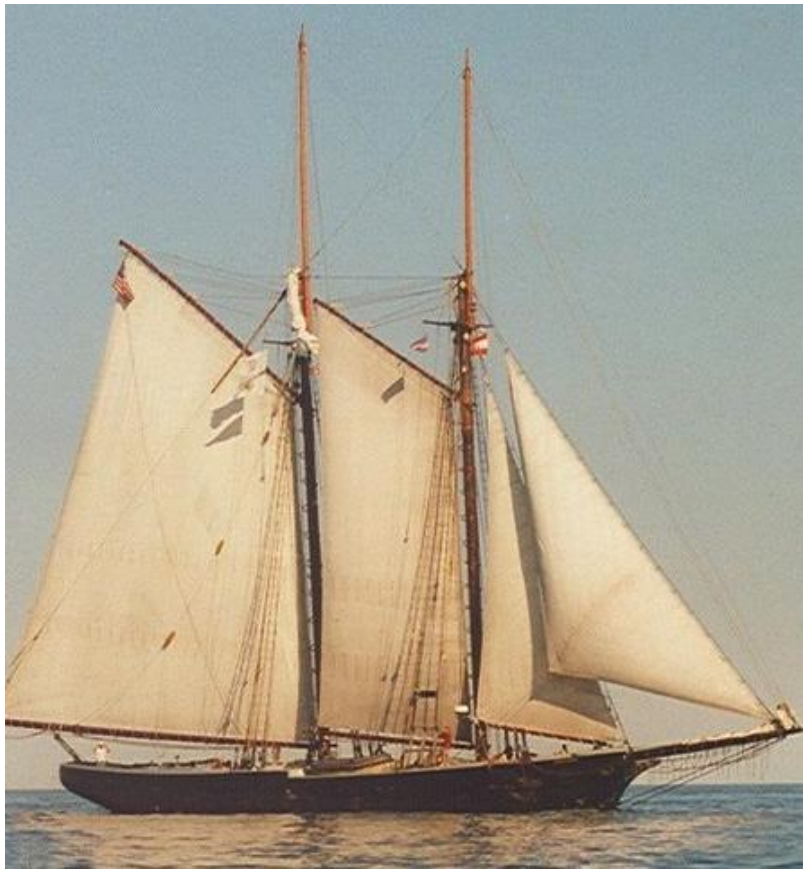










Boats on the Air

Presentation by Kent Carter KT6R and Richard Lesnick KJ6PTX

Why activate a boat, anyway?

- Combines two hobbies Into one
- Reason to go boating
- Sharing and promoting the hobbies
- Challenge of operating in a marine environment
- Emergency preparedness
- Engage with two great communities: ham radio and boating











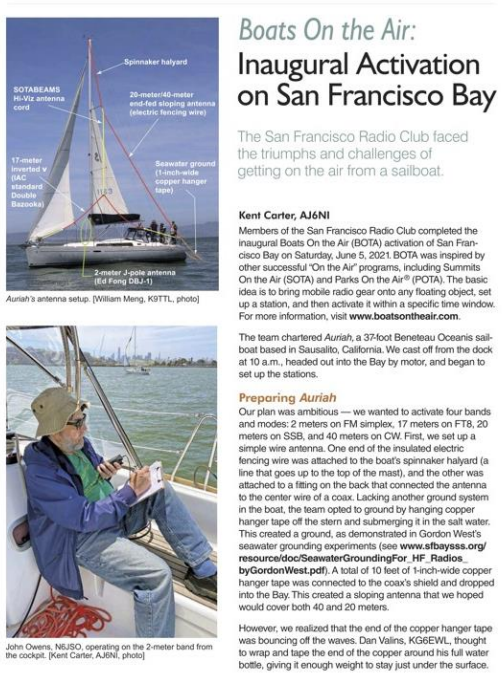






Boats on the Air Program

First Activation, June 2, 2021, by San Francisco Radio Club Members. Feature article in QST Magazine in September 2022.



Auriah's antenna setup. [William Meng, K9TTL, photo]

John Owens, N6JSO, operating on the 2-meter band from the cockpit. [Kent Carter, AJ6NI, photo]

Boats On the Air:

Inaugural Activation on San Francisco Bay

The San Francisco Radio Club faced the triumphs and challenges of getting on the air from a sailboat.

Kent Carter, AJ6NI

Members of the San Francisco Radio Club completed the inaugural Boats On the Air (BOTA) activation of San Francisco Bay on Saturday, June 5, 2021. BOTA was inspired by other successful "On the Air" programs, including Summits On the Air (SOTA) and Parks On the Air® (POTA). The basic idea is to bring mobile radio gear onto any floating object, set up a station, and then activate it within a specific time window. For more information, visit **www.boatsontheair.com**.

The team chartered *Auriah*, a 37-foot Beneteau Oceanis sailboat based in Sausalito, California. We cast off from the dock at 10 a.m., headed out into the Bay by motor, and began to set up the stations.

Preparing *Auriah*

Our plan was ambitious — we wanted to activate four bands and modes: 2 meters on FM simplex, 17 meters on FT8, 20 meters on SSB, and 40 meters on CW. First, we set up a simple wire antenna. One end of the insulated electric fencing wire was attached to the boat's spinnaker halyard (a line that goes up to the top of the mast), and the other was attached to a fitting on the back that connected the antenna to the center wire of a coax. Lacking another ground system in the boat, the team opted to ground by hanging copper hanger tape off the stern and submerging it in the salt water. This created a ground, as demonstrated in Gordon West's seawater grounding experiments (see **www.sfbaysss.org/resource/doc/SeawaterGroundingFor_HF_Radios_byGordonWest.pdf**). A total of 10 feet of 1-inch-wide copper hanger tape was connected to the coax's shield and dropped into the Bay. This created a sloping antenna that we hoped would cover both 40 and 20 meters.

However, we realized that the end of the copper hanger tape was bouncing off the waves. Dan Valins, KG6EWL, thought to wrap and tape the end of the copper around his full water bottle, giving it enough weight to stay just under the surface.





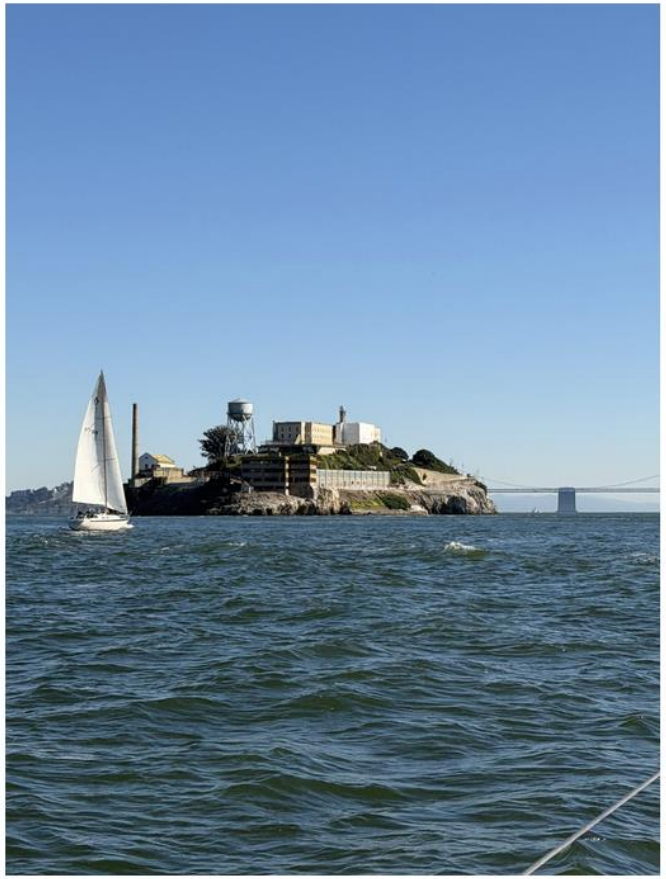
Boatsontheair.com

BOATS ON THE AIR

A hub for others to share and discover activations.

- Activator Call Sign
- Description
- Activations Start/End
- Boat Name
- Vessel Type
- Home Port
- Body of Water
- Grid Square
- Boat Make and Model
- Boat Photo

Kokomo





AA6PP

Activation Start (UTC):	05/23/2026 5:30 pm
Activation End (UTC):	05/23/2026 7:30 pm
Home Port:	Sausalito







Rules

1. As long as it safely floats, any type of watercraft is allowed to be used.

2. Activator must obey Local, State/Province and Federal/National Safety guidelines and laws or will be disqualified.

3. The boat may be underway, anchored, moored or in port/alongside.

4. Activator must make a minimum of 4 QSOs in a 24 hour period for your activity to count toward a Boats on the Air activation.

5. Chasers still gain credit via the activator's logs.

6. Activators must submit the log to their boatsontheair.com account in ADIF format.

7. Use of repeaters is not allowed for activations, except when the repeaters are on board satellites and space stations.

Yes, any boat!



Don’t own a boat? No Problem!

- Ferries
- Cruise Ships
- Historical Ships
- Chartering
- Rowboat Rentals
- Sailing and Boating Clubs
- Inflatables/SUPs/Kayaks
- OPBs







Activator Awards



Award	Qualifying Activations
First Splash	1
Deckhand	5
Bosun	10
Mate	25
Captain	50
Commodore	100
Admiral	250

Chaser Awards



Award	Activators chased
First Hail	1
Lookout	5
Signalman	10
Pilot	25
Harbor Master	50
Flag Officer	100
Fleet Admiral	250



Safety First!

- Weather and Ocean Conditions
- PFDs (life jackets) + throwables
- Flares, Fire Extinguishers, Airhorn, Navigation Lights
- VHF Radio for Marine Bands
- First Aid Kit

Activation Preparation

- Choose an engineering lead for the activation
- Coordinate radio equipment amongst activators
- Equipment redundancy is always a great idea
- Food and beverages
- Boat friendly shoes, hats and clothing
- Pick a comfortable time frame for the activation window
- Plan for last minute cancellations





Important items to bring that are unique to Boats on the Air

- Rigging tape
- Cinch straps
- Lighter
- Sunscreen
- Seasickness prevention
- Headsets

Activation Day!

- Skipper gives safety meeting, schedule, float plan, and assigns boat operation roles. Someone should ALWAYS be in charge of safely operating the boat.
- Engineering lead lays out the plan: antennas, multiplexer, operating positions, etc.
- Set up antennas
- Set up equipment





Antennas on a Boat

- Antenna ideas: taking advantage of unique aspects of boats (diagram of original activation)
- Grounding via counterpoise
- Don’t use the boat’s ground
- Considerations while underway (effects of boat movement)
- Transmission lines - rigging tape is your friend


Spinnaker Halyard
SOTABEAMS
Hi-Viz Antenna
Cord
20m/40m end-fed
sloping antenna
(electric fencing wire)
17m inverted V
(IAC Standard
Double Bazooka)
Seawater
ground
(1" wide
copper
hanger
tape)
2m J-Pole
antenna
(Ed Fong DJB-1)
Auriah
BENETEAU
1163



Activation Time!

- Safely boating while activating.
- Pulling up counterpoise before the engine starts.
- Operating multiple stations (bands and modes) in a small space (headsets).
- Preventing Interference.
- Exchange: “Boats on the Air,” boat name, and boat location for chaser’s interest
- Contesting on board. (Established contests + Local Club Contest – CA QSO Party)
- Taking turns makes for a happy crew! Offer everyone time on the radio and the helm.

Get out there!



Tiny Bubbles in SF Bay near Angel Island

Activation Start: November 7, 2026 at 11:15 AM PST

⚓ Tiny Bubbles · BOTA-0005



The 7th Annual SFRC
Angel Island OTA-Trifecta + +

November 7, 2026

Activation: 11:15 - 14:15 PT (19:15 - 22:15 UTC)

BOATS ON THE AIR

