Here's how K1PCK combined two interests—sailing and amateur radio. This little antenna can be installed in a jiffy.

## A 10 Meter Antenna For Maritime Mobile

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igh sea adventure and amateur radio naturally seem to go together. Both are modes that carry the spirit to those romantic far-away places. I have had the opportunity to combine both adventure modes into an ideal vacation plan aboard one of New England's many sailing schooners.

Today's solid state rigs present no serious space problems for the vacationing maritime mobiler. However, the antenna needs required by this high adventure are quite another story. To help overcome the restrictions that the salty amateur adventurer is faced with, I designed the following plans for what I call the Tall Ships' 28 MHz vertical dipole. The following instructions are for an antenna whose resonant frequency is cut for the lower c.w. portion of the 10 meter band. Other useful frequency specifications appear at the end of this article.

The rigging of a schooner is complex. It requires neatness and orderliness to sail properly. In designing my maritime mobile antenna, I had to take these restrictions into consideration and come up with an antenna that would fit into a small area on the mast where it would not interfere with the proper sailing of the ship. Vertical polarization is ideally suited to these restrictions, because a vertically polarized dipole mounted one wavelength above ground, or in this case saltwater, gives the best low-angle radiation for omni-directional DX work. Also, with the use of loading coils, the compactness of this 5-foot dipole allowed parallel mounting to the wooden mast. It should be obvious that this type of antenna will only work with a nonconductive mast.

Before beginning this antenna project, you will need the following materials:

RG8 or RG58U feed line, any length, and two male coaxial connectors.

20 to 30 feet of No. 10 insulated copper wire.

3.5" @ 4 turns per inch #10copper wire Total turns = 13.75 Required load inductance is 4.37mH Sailing ship mast Coils held by glue 2.5' (C) 7(A) Military type webbed belt with sliding brass buckles glued to plexiglass (B) (2 required) Female coax connector 6" 2 screws and glue hold (A) to (B) LEGEND: 2.5'  $(A) = 24'' \times 3'' \times .25''$  plexiglass (B) =  $12'' \times 3'' \times .25''$  plexiglass (C) = 12" x 3" x .25" plexiglass

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Fig. 1- The simple construction details for the maritime mobile 10 meter antenna.