

FOURTH ANNUAL W.J.C.L. WAR MACHINE CONTEST

January 2010

Guidelines

Challenge: To build a water-worthy replica of a Roman *navis oneraria* from tin foil. Since this is the Roman army's supply ship, the winner will be the boat that can bear the heaviest load, as measured by number of pennies that the ship can hold before sinking. Besides the physics, there is some artistry involved as all competing ships must look like the *oneraria* as pictured below:



Size: The body of the boat must be 12" prow to stern, although the front finial/rudder and rear sail may extend beyond the 12" because they are non-functional. The height of the sides of the boat may not exceed 6 ½ ". The height/usability of the main and rear sails/rudders/any moving parts are not regulated as they are non-functional but must be included in order to compete.

Building Materials: aluminum foil (understood as the product sold in grocery stores for food Storage)

Scotch tape

Bamboo skewers/string/tissue paper for masts/sails

Caveat: Nothing may be inserted between layers of tinfoil to increase buoyancy.

Judging criterion: The boat must float.

It must be able to receive pennies reasonably easily.

The winner will be chosen for its ability to hold the most pennies before sinking

Each boat will be floated in a washtub of water.

The top five winners will, *after competition*, be pierced with an ice pick at

half inch intervals along the bottom and sides to confirm that only tinfoil has been used in construction

A tie will be addressed according to the aesthetics of the

entry, since so much of the heritage of the Roman culture is also its architectural values (beauty, design, style).

- the aesthetic judging will be done by the team judging convention art projects

Competition procedure:

- The contest is limited to one entry per school
- The results of the contest will contribute to sweepstakes points
- The goal is to award 1st through 5th places