Aluminum Foil Watercraft Prototype
For The Three Little Pigs
Goal

Your goal is to build a prototype of a seaworthy aluminum watercraft to hold as much cargo as possible.
Role

You are an expert boatbuilder specializing in aluminum watercrafts.
Audience

The Three Little Pigs.
Situation (1 of 3)

The Three Little Pigs recently inherited their mother’s estate and now seek new adventures. They desire to sail the oceans to explore the great wide world. They need a seaworthy vessel!
While two of the pigs occasionally suffered from immaturity and frivolousness, they admired their other brother’s work ethic. All three attempted to make a sturdy watercraft on their own. However, their experimental boat made of bricks sank upon the first launch with zero cargo!
Situation (3 of 3)

These adventurous piggies need your expertise to start their new lives safely on the ocean in a watercraft of optimal seaworthiness. You will demonstrate your boatbuilding skills to them by making an aluminum foil prototype.
Product

Create an aluminum foil watercraft prototype to hold as much cargo as possible.
Standards & Criteria for Success (1 of 4)

The aluminum foil prototype watercraft shall support as much cargo as possible before failure (i.e., fully sinking into the water). Cargo units shall be measured in U.S. pennies.
An entire 5-inch square piece of aluminum foil shall be used to make the prototype. The foil may be cut, ripped, or folded into any shape.
Standards & Criteria for Success (3 of 4)

≥ 15 pennies = adequate
≥ 30 pennies = average
≥ 50 pennies = expert
Current data reference: Four 5-inch prototypes were tested. The number of pennies at failure for each were:

11  17  36  58