



INTRODUCTION:

The goal of the project is to design a boat that has advanced performance and attractive design. The purpose is not to innovative boat building and the concept actually takes after leading designs by current yacht companies. Yacht companies that value woodwork and traditional style have a growing interest in the world of boating. Despite the traditional style the boats are leading in performance as well. The concept of this project takes after the attractive lobster boat design while also having high efficiency in performance.

DESIGN PROCESS:

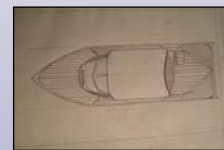
Performance: The first goal of the design is performance. After doing research and evaluation of many different hull styles, the “V” hull was chosen for the design. It offers ultimate stability and control at high and low speeds. Other designs considered were the catamaran and dual “V” hull designs. However these designs did not offer desired performance.

FINAL SPECS: -Length: 38ft -Beam: 12ft -Draw: 24 inches -Weight: Appx. 21,750 lbs -Engine: Twin 550hp

Visual Appearance: The second task of the design is creating a boat that is visually appealing. This was accomplished by sketching and drawing design considerations. By narrowing down the options to a few designs I was able to draft a final design concept. The final design has changed as I modified it throughout the project.

FINAL DESIGN

The final design drafts are what the design model is based on.



FABRICATION OF MODEL:

In order to demonstrate the design I built a 1/15 scale size model. The hull is constructed of fiberglass and the cabin and flooring are wood. The greatest task in building the model was constructing the hull. Since this required making a mold, a cast, and layering the fiberglass on the cast.

The Hull:



1. Building a molding frame and shaping clay to hull specs

2. Casting the clay hull with molding plaster

3. Laying fiberglass on the plaster forming a lightweight and strong hull

The Cabin:



1. Flooring

2. Cabin Construction

3. Painting and bonding

FINAL MODEL OF DESIGN



CONCLUSION:

The most impressive part of this design is the detailed flooring work. This offers a sense of tradition and quality. The design can be improved by having a more dominant hull. Further work includes creating more designs and models. There is also possibilities of creating a working model that is capable in water and has remote control.

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