



New Housing Structure for Deep-Sea Equipment

Team No: 21

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Aim: To design a new TOV to improve upon the problems of FSU's current TOV.

Background

- Purpose is for surveying and exploration ocean
- Vehicle is dragged behind ship using tether
- FSU's TOV is too spacious, heavy, has difficulty transporting and does not tow levelly.

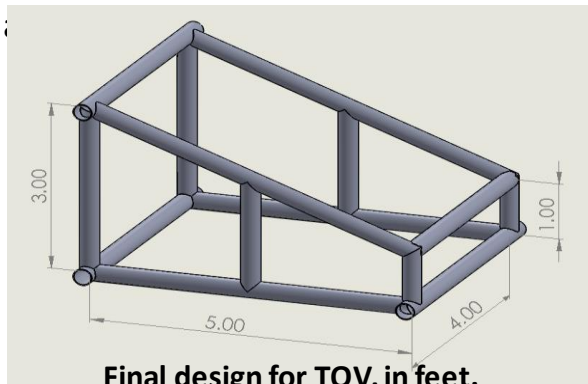
Objectives

- Maximize footprint area
- Reduce weight
- Maintain level towing angle, passively

Technical Approach

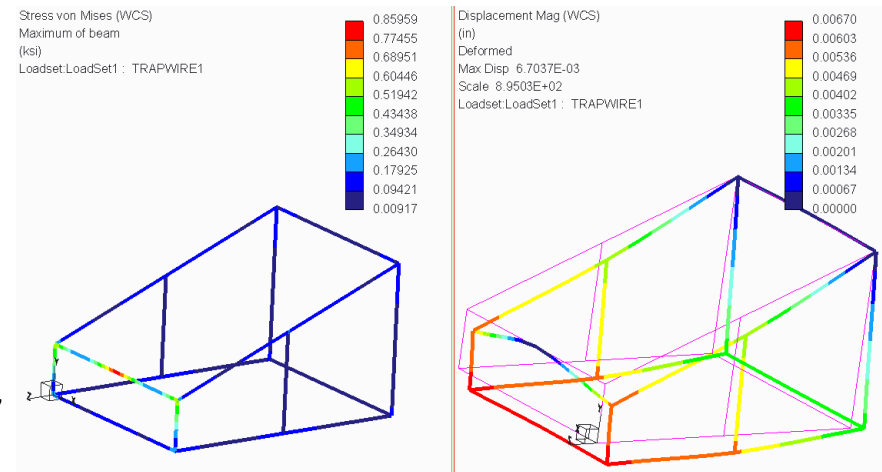
Experimental Analysis using models

- Features are added to the model to maintain orientation.
- Cable for model: steel braided cable
- Experimental testing will be performed in flume and pool
- Testing for system stability, component weight distribution,



Accomplishments

- Completion of model testing
- Design of hollow circular models and final design
- Materials ordered
- Modeling of equipment inside structure



Future Work

- Machine full scale design based upon tests
- Attach data collecting equipment Test in Civil Department pressure chamber
- Final submersion in Gulf



Earth, Ocean and Atmospheric Science