Design and Fabrication of a 1/3 Scale Gemini-Style Capsule

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Overview

The fall 2010 MAE 491/492 1/3 Scale Gemini Capsule Completion team’s mission is to design, fabricate, and attach an outer shell with the possibility of a parachute/parasail attachment to the existing capsule frame in cohesion with the landing gear.

The frame was designed and fabricated by the MAE 490 fall 2009 Gemini Capsule frame team.

The landing gear was designed and fabricated by the MAE 490 spring 2010 Gemini Capsule Completion team.

The shell must have an opening for easy access to the inside of the capsule for additional measurement instruments.

Impact

1. Space-based industries can gain information from the 1/3 Scale Gemini Capsule Completion Team’s research to assist future space endeavors.

2. Land-based landings will help increase safety and security for future government and civilian use.

Key Findings

1. Easy to manufacture from readily accessible materials.

2. Strategic focus on continuing improvement.

3. Can be completed on a student’s budget!!!

Explanation

The 1/3 scale Gemini-style capsule will incorporate aspects of an early NASA 1/3 scale capsule using contemporary technologies for civilian and government space applications.

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