

MEETING MINUTES

Topic: Material Research Discussion and Deliverable Planning

Monday, November 27, 2017

6:30pm –8:00pm

Minutes recorded by Brandon Cook

Meeting called by Joshua Smith

Attendees: Joshua Smith, Brandon Cook, Miriam Deschine, Dan Edmonds

Please bring: Laptops, material research

Executive Summary:

The purpose of this meeting was to cover what information the team had researched over the break relating to discussion with Orbital. Some items of discussion were latching mechanisms, track systems, and material suppliers. The team made decisions on what materials to use from those researched and also made the decision to move away from a hydraulic ram deployment system. Instead a winch and pulley system is to be used for simplicity, cost, and special reasons.

Table 1. Record of meeting.

6:30pm to 7:15pm	Meeting Overview <ul style="list-style-type: none">• The team began by discussing what they had completed over the break.• Dan drew some ideas for locking mechanisms to hold the deployed system that he had come up with.• The team discussed a latch system similar to an 8 car semi trailer to put the load on a member other than the hydraulic ram once it is fully deployed.• Josh, Brandon, and Miriam had looked up material suppliers for the needed materials.• Josh found a supplier for HDPE in Arizona, a tubular rail system, and many Carbon Fiber Suppliers• Brandon discussed his research with v shaped guide rail systems similar to a fence, types of carbon fiber, and tent poles along with some ball part cost estimates.	EGR CS Project Room
7:15pm to 7:50pm	Project decision making <ul style="list-style-type: none">• Discussed how far we want the HDPE to come downward. Decided the bottom two sections of HDPE should be removeable and the third section from the ground should have reliefs cut to allow wind to pass through• Discussed Tongue and groove clamping mechanism• Discussed what type of carbon fiber we would want to use for the main beams. Unilateral, torsion resistant, low CTE/ZTE?	EGR CS Project Room

7:50pm to end	Plan for next meeting <ul style="list-style-type: none"> • The next meeting will be Tuesday at 5:30 in the engineering building • We will be meeting to work on the CAD and BOM 	EGR CS Project Room
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Table 2. Tasks Assigned.

Task	Person Assigned	Due Date	Date Complete
Meeting Minutes	Brandon Cook	ASAP	
Website	Dan Edmonds	ASAP	
CAD	Brandon Cook Miriam Deschine Dan Edmonds Josh Smith	12/7/17	
BOM	Brandon Cook Miriam Deschine Dan Edmonds Josh Smith	12/7/17	
Prototype	Brandon Cook Miriam Deschine Dan Edmonds Josh Smith	12/7/17	

Next formal meeting: 11/28/17, Engineering, at 5:30pm.