

Fourth General Body Meeting

Date: October 28th, 2008

Time: 6:15 pm

- Agenda
 - JPL Internship Presentation – Javier Stober
 - Design and Data analysis for entry, descent, and landing of next generation Mars rover
 - JPL – located near Los Angeles
 - World leader in unmanned spaceflight
 - Operate Deep Space Network – communication system for all artificial satellites in the solar system
 - Mars Science Laboratory
 - Much larger than previous rover designs
 - To be launched September 15th, 2009
 - Deploys a sky crane for landing, as opposed to previous airbag designs
 - Primary work for the internship dealt with 7 seconds in which the sky crane was operating
 - Most ensure umbilical cord does not recontact rover after severing
 - Ran Monte Carlo simulation to predict umbilical cord movement
 - Design piece to interface Descent Stage panel/Bridle Exit Guides for ground transport
 - In addition to internship, toured JPL manufacturing lab, Mars Science Laboratory clean room, model rover testing grounds, ATHLETE device, and local LA landmarks.
 - Way to get NASA internships – NASA Undergraduate Student Research Program
 - Go to NASA's homepage → “For Students” → “Higher Education” → “Education Programs”
 - Contact Javier if you have any question – stoberx@ufl.edu
 - Aero Design Projects – Dr. Lind and Brent Kossina
 - DBF was getting too large, so the new Aero Design Team is providing an opportunity for more students to get involved with aerospace design projects
 - Aero Design Team Subgroups:
 - DBF
 - Urban Camouflage – disguising a sensor such that a person walking by wont even notice that its there
 - Two designs idea already – Monster energy drink can, Gatorade bottle
 - Angioplasty Airplane – use angioplasty concept to morph wings on micro-air vehicles in order to achieve aerodynamic effects
 - Pterosaur Airplane – can we build an airplane with a forward vertical tail that flies?
 - Additional Discussions:
 - Gulfstream Tour – Rafael Lozano
 - Registration deadline is **November 1st** – email rlozano737@ufl.edu if you want to go.
 - Trip will be on **December 4th** to the Gulfstream facility in Savannah, GA
 - Will be a tour of the facility and also a recruitment opportunity.
 - If you want to go, you must register with Rafael by email and also drop by the AIAA office and give your country of origin.
 - Gatorwalk – Ashley Jurekovic
 - **November 16th** – Morning shift for set up, late afternoon shift to close up

- Email Ashley if you are interested by Wednesday afternoon – ashgr84@ufl.edu
- Gelato Company Social
 - **October 30th** 6-8 pm– Meal, drink, and gelato for under \$10
 - Let your cashier know you are with AIAA
 - Proceeds go to the design teams!
- DBF Team 1
 - Building aircraft now
 - Two wing sections cut out
 - Need help with electric motor work
- HRT Team
 - Team meetings going on
 - Several grants coming in, ready to get started on making a prototype
- **Next Meeting in 3 weeks – November 18th**