

2012 AIAA Region II Student Conference

Title:BALLOONS BUILD SATELLITES: THE PROGRESSION OF A STUDENT SATELLITE DESIGN GROUP

Presenter(s):*Mark Becnel

Topic:Other

Category:Technical Paper - Masters

Allow Co-Presenters:Y

Comments/Special:Mark D. Becnel - Graduate Teaching Assistant, Mechanical and Aerospace Engineering Department, UAHuntsville Space Hardware Club Vice President, AIAA Student Member

Abstract:

Student groups nationwide are developing satellites, many in the form of a CubeSat. With the third Announcement of CubeSat Launch Initiative by NASA, 43 groups nationwide proposed for launch. These student groups have formed under various circumstances, often unique to their university. The students at the University of Alabama in Huntsville were accepted for this launch opportunity. The UAHuntsville students are developing ChargerSat-1, a 1kg, 10cm³ satellite. ChargerSat-1 is a project of the UAHuntsville Space Hardware Club. I will present the beginnings of the Space Hardware Club and its progression from amateur ballooning to the satellite development group it is today. By understanding the origin of the Space Hardware Club, students with similar satellite ambitions can learn and build the organization necessary to support their own program. With students working on both ballooning and satellite development, the extracurricular participation affects the curriculum. I will also present the relationship this activity has with the curriculum.