The Design and Management of a Low Cost Scientific STEDI Mission

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ABSTRACT

The release of the Student Explorer Demonstration Initiative (STEDI) Opportunity of Announcement in May 1994 generated a tremendous amount of excitement and activity within the small satellite community. To meet the very tight constraints of the STEDI program (2 years, $4 million) a new paradigm for small science satellites must be created which centers on university involvement. This paper describes the collaborative process for the three university CATSAT project and focuses on some of the issues that are important for a successful university small satellite program. These points include: running a program from within a university environment, creating a model for low cost and reliable distributed design and technical oversight, and the development of a simple and effective communication and documentation process. CATSAT is a small astrophysical science satellite which is currently being funded to serve as the alternate for the two primary STEDI missions.