



## New Opportunities for Space Grant CubeSats

*Crawl*

*Walk*

*Run*

*Fly*



# I. New NSF CubeSat Program

## CubeSat-based Science Missions for Space Weather and Atmospheric Research

[Program Solicitation](#)

NSF 08-549



**Full Proposal Deadline(s)** (due by 5 p.m. proposer's local time):

May 28, 2008

February 10, 2009

February 10, Annually Thereafter

**National Science Foundation**

Directorate for Geosciences

Division of Atmospheric Sciences



The overarching goal of the program is to support the development, construction, launch, operation, and data analysis of small satellite science missions to advance space weather and atmospheric research. Equally important, it will provide essential opportunities to train the next generation of experimental space scientists and aerospace engineers.

Beginning in 2009, NSF expects to launch two to four P-PODs every year, accommodating at least as many (three to six) individual satellite missions.

Launch of the P-PODS will be as auxiliary payloads on DOD, NASA, or commercial launches.



## Award Information

**Anticipated Type of Award:** Standard Grant or Continuing Grant

**Estimated Number of Awards:** 3 to 6

**Anticipated Funding Amount:** \$900,000 annually, pending availability of funds.

**Cost Sharing Requirements:** Cost Sharing is not required under this solicitation.



## II. NASA Launch Opportunity

Garrett Skrobot, of NASA Launch Services at KSC, has been working hard to get a P-POD manifested as a secondary on a NASA launch. This is called the ELaNa (Educational Launch of Nanosatellites).

The current focus is on the launch of the Glory Earth Science mission, expected to launch on July 15, 2009, on a Taurus XL from Vandenberg. Other missions are also under consideration for the addition of a P-POD.

This is intended to be the first in a series of opportunities.

In June, 2008, six CubeSat projects underwent site reviews by a NASA panel to select three for flight at the first opportunity; a fourth CubeSat was to be selected as a “hot backup” to be ready to be substituted for any of the three that might not be ready on schedule.



## From the P-POD Selection Criteria:

*Is the CubeSat being developed as part of a Space Grant Consortium?*

This criterion was worth 10% of the total score – showing a very strong preference For Space Grant - connected CubeSat projects

RESULTS announced September 17:

Selected for flight:

Explorer 1 Prime (Montana State University)

KySat (University of Kentucky)

HERMES (University of Colorado – Boulder)

Hot Backup:

ASTREC-1 (University of Florida)



## Concerns:

- (1) NASA has not yet fully committed to flying the P-POD as a secondary on any mission; the usual fears of the primary payload managers must be overcome.
- (2) NASA LSP intends to charge the universities an amount equal to the “commercial going rate” for a CubeSat launch – this is not a free ride (however, the lack of ITAR issues is a definite plus!).

We hope there will be Space Grant CubeSats in orbit before the next WRSGM!