

Educational CubeSats Update



National Space Grant Director's
Meeting

March 4, 2011

ELaNa I Update

- Montana, Colorado and Kentucky had nanosatellites on the Taurus rocket this morning
- Protective shell didn't separate as needed; satellites didn't achieve orbit
- Spacecraft likely in South Pacific
- Opportunity for students still great

Upcoming opportunities

- NASA CubeSat Launch Initiative - recent selection includes a mixture of NASA and educational nanosatellites - over half are educational
- Some educational satellites are Space Grant supported projects
- Launches to occur over the next two years
- Examples...

Question on vibrate test requirements

- Taurus XL is the toughest (ELaNa I)

3.4.8 Sine Vibration

The CubeSat will perform a sine sweep, to the levels in Table 3, before and after each random vibration test in all three axes to identify possible structural changes.

Table 3: Sine Vibration Levels

Frequency Range (Hz)	Sine Level (g)	Sweep Rate
20-2000	0.5	3 Octaves/min
2000-20	0.5	3 Octaves/min