

# Student Rocket Payload Contest

## Funded by the ND Space Grant Consortium

The **ND STRIPE project** is soliciting proposals for North Dakota students to participate in a rocket payload contest. Student teams are expected to develop original scientific payload experiments or designs that are to be flown on a high powered rocket. Eight winning proposals across North Dakota schools will be chosen to actively engage in (1) building a high powered rocket, (2) building a component of their proposed payload and, (3) then compete in a rocket fly-off in April 2008. The contest will be judged by experts in the rocketry field.

**Deadline for Submission:** Friday November 2, 2007. Student proposals must be received in the Physics Department office or submitted electronically on the website <http://rocket.und.edu>.

**Student Rocket Payload Teams:** Each team must have at least four (4) full time students, half of which must be undergraduates. Only teams are allowed to submit proposals, no individuals. Only one proposal per team can be entered.

**Criterion for judging proposals** will include: Innovation, Scientific Merit and Feasibility.

**Innovation** – Concept and/or design must be original.

**Scientific Merit** – An experimental payload testing a hypothesis or a new experimental design is necessary.

**Feasibility** – The proposal must state how it will fly in the large rocket. The proof-of-concept payload must be flyable and conform to TRIPOLI guidelines for amateur rocketry (see ND STRIPE website). The payload must be able to be produced within the budget constraints (see below).

**What to submit:** To be considered in the contest student teams need to submit Rocket Payload Proposal: Limit 5 pages should include: (1) Introduction, (2) Objective or hypothesis, (3) methods, (4) procedure, (5) results expected, (6) adaptation to fly the proposed experiment/design on a large rocket.

**Eight winning teams** will receive the following:

1. A commercial rocket kit.
2. A commercial motor casing and three (3) solid fuel re-loadable motors. (This is only to be handled by the faculty advisor).
3. Payload supplies (between \$300-\$500).
4. Facilities for launching the student rockets will be made accessible.
5. A chance to develop and fly a full scale payload in a rocket that can reach 100,000 feet. Three teams will be chosen from the April fly-off. Rules will be distributed to the eight competing teams once they are chosen.

**More details can be found at <http://rocket.und.edu>**

