

The North Dakota Space Grant Consortium (NDSGC) and the University of North Dakota (UND) will be holding the fourth annual Near Space Balloon Competition in the fall of 2014. We invite all interested North Dakota 6th-12th grade students to submit a payload proposal using this form. Please submit completed proposal forms by October 10, 2014 by email or mail to:

balloons@ndspacegrant.org

or

North Dakota Space Grant Consortium Clifford Hall Room 513 4149 University Avenue Stop 9008 Grand Forks, ND 58202-9008

Teams will be notified of their proposal's acceptance by October 14, 2014. Accepted teams will be funded up to \$250 for supplies and additional travel funds will be provided for your team to attend and participate in the balloon launch. For more details, visit <u>http://ndspacegrant.und.edu/pre-college/payload_competition.aspx</u>.

Tentative Schedule of Events

October 10, 2014	Proposals Due
October 14, 2014	Teams Notified of Acceptance
October 14, 2014 – October 24, 2014	Web meeting for feedback on accepted proposals (Individual Teams)
November 5, 2014	Midterm progress report web meeting (All Teams)
November 21, 2014	Pre-launch orientation meeting @ UND
November 22, 2014	Launch Day
December 13, 2014	Back-up Launch Date

If you have any questions please contact Tim Buli, competition coordinator, by email at <u>balloons@ndspacegrant.org</u>



I. Proposal Form Instructions

- 1. Please fill in all applicable fields completely to ensure full consideration of your proposal.
- 2. You may attach additional documents and information at the end of the form.
- 3. Submit completed form by **October 10, 2014** by email or mail to:

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4. If you have any questions please contact Tim Buli, competition coordinator, by email at <u>balloons@ndspacegrant.org</u>

II. Payload Guidelines

In designing your payload we encourage you to be creative. We must however enforce the following design limitations to comply with FAA safety regulations.

- 1. Your payload can be any shape but must be no larger than $2 \ge 2 \ge 2$ feet.
- 2. The total weight of your payload must be less than 2 lbs.
- 3. Plants are OK, but no live animals!



III. Team Information

School:	
Faculty Mentor Name:	
Contact Email:	
Phone:	
Mailing Address:	
Team Name:	

Team Members' Names:



IV. Payload Details

A. Payload Type

Our payload will be (please check at least one):

- Scientific Experiment
 (Please Fill in Section B)
 Includes a Hypothesis, a
 Control, and Observations
 Examples:
 - Measuring temperature and pressure in the atmosphere
 - Determining if plant seeds sent to near space will germinate once returned to Earth

B. Scientific Experiment

Technology/Engineering
 (Please Fill in Section C)
 A device or gadget to achieve some

objective(s)

- Examples:Amateur Radio equipment for tracking or communication
- A "space capsule" to protect an object during its flight
- A camera for recording the balloon flight
- 1. What hypotheses can be drawn from the experiment?
- 2. What will be the control group for the experiment?

3. How will the data be recorded?



C. Technology/Engineering

1. Describe the objective(s) for your payload.

2. Describe how you will meet your objective(s).

3. Describe the context(s) for which your payload might be useful (long range communications, aeronautics etc.).

D. Please provide a material list and rough budget for your payload:



E. Please provide a sketch or schematic of your proposed payload. (Attachments are acceptable.)