

Pete Conrad Spirit of Innovation Award 2008 Rules

Award Topics: Personal Spaceflight & Lunar Exploration

Eligibility Rules:

- 1) Entrant teams must be composed of a maximum of 5 students with one adult as the team advisor.
- 2) Entrants must have an adult advisor above the age of 18.
- 3) All team members must be enrolled in high school (or the equivalent home schooling level) for the fall 2008 semester. No team member can be over the age of 18.
- 4) The X PRIZE Foundation reserves the right to disqualify a team at any point in the registration, submission, or judging process if it is found that they do not meet one or more of the rules.
- 5) Students may compete in one of two concept areas:
 - a. **Personal Spaceflight** – assuming you can go to space, create an innovative concept and business plan for personal spaceflight.
 - b. **Lunar Exploration** – assuming you can go to the Moon, create an entrepreneurial enterprise for lunar exploration.

Submission Rules:

- 1) Entrants must submit their concept electronically via the X PRIZE, Pete Conrad Spirit of Innovation Award web-form.
- 2) Submissions must be entirely the work of the student team members. The advisor may guide the team but may not do any writing of the submissions, and may not have excessive influence on the concept design (the determination of excessive influence is up to the sole discretion of the award management team).
- 3) Submissions must not plagiarize any published materials. Concepts must be original and solely developed by the student team members, not an outside source. In their submission, students must demonstrate the originality of their concept. Any data from outside resources may be used as supporting information for the concept, but must be cited properly in the team's submission documents.
- 4) Initial entries MUST include:
 - a. A "**Technical Concept Report**" – this report must be in either MS Word or PDF format. The report should focus on explaining the concept's Innovation, Practicality, Completeness, Marketability, and Relevance. Background references for specific details are expected in this document, all references must be properly cited. The report must include:
 - i. *Executive summary* – a brief outline of all aspects of the concept. 1 single spaced page maximum.
 - ii. *Background information* – information and resources on why the concept is important and how it benefits the personal spaceflight industry. 2 single spaced page maximum.
 - iii. *Concept details* – a description of all details about the concept: its originality, how it is used; measurements; rules of use; etc. Details should show that the concept is significantly different from others similar to it; also that it is of use to the personal spaceflight industry; and that it does not violate any physical or common sense laws. Details should be written concisely. Limit to 5 single spaced pages maximum.
 - iv. *Appendix* – up to 2 single spaced pages can be added for appendices that can include charts, images, bibliography, etc...
 - b. A "**Business Concept Report**" – this must be in either MS Word or PDF format. This report is to show that the team understands the business aspects of their concept and have thought about how it would be sold commercially if actually created. The report should be no more than 5 single spaced pages in length and should include:
 - i. *Market* – who their concept will be sold to, and how it will be sold.

- ii. *Value* – the price range of the concept. Details should include benefits to all associated parties, budgetary breakdowns of its development costs and selling price. If the concept has multiple parts a value for each part should be described.
 - iii. *Selling points* – a set of key points that explain what makes their concept unique and better than anything similar that is out there.
 - c. A “**Graphical Concept Representation**” This can be a computer graphic program (CAD, Photoshop, etc...), drawing, 3-d computer model, or photographs of an actual prototype or model. The final product uploaded as a part of the team’s submission must be in a JPEG, GIF, TIFF, or PDF format.
- 5) Submissions will only be considered if all three files (Technical Report, Business Report, and Graphical Representation) have been uploaded by the submission deadline.
- 6) All text in submissions should be no smaller than 10 point font with no less than ¾ inch margins on all sides.

Judging Rules:

Submissions will be judged in two rounds:

- 1) **Round 1: On Line.** An expert judging panel will judge all eligible electronic submissions and select the finalists. Finalist teams will be chosen on the sole discretion of this judging panel. First round submissions will be evaluated from 1 to 5 (1 being poor, 5 being best) on:
 - a. **Innovation** – how new or unique is the idea?
 - b. **Practicality** – is the idea based on sound principles? How useful is the idea?
 - c. **Completeness** – how complete is the idea, have any major areas been overlooked?
 - d. **Marketability** – How well does the team understand the market for their idea?
 - e. **Relevance** – How important is the idea to the personal spaceflight industry?
- 2) **Round 2: Finalist Event.** The finalists will be judged by three groups – an aerospace expert panel, a business and venture capital expert panel, and the public – to determine the top three awardees. The finalists will be ranked on a 1 to 5 scale with each of the three groups providing 1/3 of the vote (in other words, taking an average of the three group’s scores). The judging areas are:
 - a. **Aerospace Expert Panel** – A panel of 3 or more experts in the aerospace industries will judge the finalists presentation & display on a 1 to 5 scale in these areas:
 - i. *Science/engineering understanding* – how well do the students explain the base science/engineering behind their concept? Are there any areas that they do not seem to understand about the benefits or difficulties of creating their concept? Is there any specific technical detail they have neglected?
 - ii. *Industry need* – how well does the team understand the industry and its need for the concept?
 - iii. *Overall Presentation of Concept* – how well does the team present? How convincing are they that this is a good technical concept?
 - iv. *Overall Presentation of Display* – how well created is the display. Does it explain the science/engineering behind their concept?
 - b. **Business Expert Panel** – A panel of 3 or more businessmen, entrepreneurs, business professors and VCs will judge the finalists presentation & display on a 1 to 5 scale in these areas:
 - i. *Budget* – How well does the team understand the cost of creating their concept?
 - ii. *Market* – Does the team understand the market for their product? ? Who is their target audience? What would be the cost to the consumer ? Who are the competitors? How many products would they expect to sell? What is the sales strategy?
 - iii. *Overall Presentation of Concept* – how well does the team present? Are they convincing that this is a good business concept?
 - iv. *Overall Presentation of Display* – how well does their display sell their concept?
 - c. **Voting Public** – any member of the public will be able to vote on the teams. Voting will be conducted in two ways:

- i. **On-site** – attendees of the final awards program will be able to vote on which team's display and explanation of their concept is the best. Individuals will be asked to rate each team on a 1 to 5 scale (with 5 being the best).
- ii. **On-line** – anyone will be able to go online and view each finalist's concept video and read their concept documents. Each online voter will rank the teams on a scale from 1 to 5.

Finalists Rules

- 1) To be eligible for awards, finalist teams MUST:
 - a. **Create a presentation** – finalist teams will have 10 minutes to present their concept and 5 minutes to answer questions from the judges. Presentations should explain both the technical and business aspects of the team's concept.
 - b. **Create a tradeshow style display** – each team's displays should include a prototype, model, or mockup of their concept. They should present their concept as though it were a tradeshow booth with potential customers being the audience. All finalist displays will be provided a 10'x10' pipe & drape area for their display. One 8' table and chairs will be provided.
 - c. **Create a concept video** – videos should be no more than 5 minutes long. They can include animation, graphics, animated slideshows, or any other video content that demonstrates their concept's technical and business details. Videos will be posted YouTube, on the Conrad Award website, and used as public voting pieces to help determine the overall winners.
 - d. **Attend the finalist program** – at least one member of their team (accompanied by their advisor, or another adult chaperone) must attend the finalist program.
- 2) Prizes will be as follows:
 - a. **Finalist Travel Expenses** – some finalist teams will have expenses of traveling to the finalist program covered up to \$2500 per team. Other finalist teams will be invited to participate in the program but will be required to cover their own expenses or find sponsors.
 - b. **Finalist Team Commemorative Plaque** – all members of the finalist teams will receive a commemorative plaque at the award ceremony.
 - c. **Award Medals** – 1st, 2nd, and 3rd, place teams will be given medals for their concepts.
 - d. **3rd Place Educational Grant** - A \$1500 educational grant will be given to the team's advisor for distribution at his/her discretion
 - e. **2nd Place Education Grant** – A \$2500 educational grant will be given to the team's advisor for distribution at his/her discretion
 - f. **1st place team will receive the following:**
 - i. *Inclusion in The Pete Conrad Spirit of Innovation Trophy & Display* – this trophy (created by Erik Lindbergh, the grandson of aviator Charles Lindbergh) will be on loan to the winning team and will travel to museums and science centers around the world with a display of the winning team's concept (including team names, member biographies, etc...).
 - ii. *Pete Conrad Scroll* – team member names will be added to a scroll that will be on display with the traveling Pete Conrad Trophy.
 - iii. *A \$5000 educational grant will be awarded to the team's advisor for distribution at his/her discretion.*
 - iv. *Finalists will have the opportunity to meet with business professionals to assist them in their efforts to bring their product to the commercial marketplace.*

The X PRIZE Foundation reserves the right to update competition rules at any time for any reason. All registered teams will receive notice via email of any changes to the rules.