



Centennial Challenges

NASA's Centennial Challenges Program drives innovation, creates opportunity and seeks to stimulate inventors through the communication of challenge competition results.

NASA Centennial Challenges were initiated in 2005 to directly engage the public in the process of advanced technology development.

The program offers incentive prizes to generate revolutionary solutions to problems of interest to NASA and the nation. The program seeks innovations from diverse and non-traditional sources. Competitors are not supported by government funding and awards are only made to successful teams when the challenges are met.



In keeping with the spirit of the Wright Brothers and other American innovators, the Centennial Challenge prizes are offered to independent inventors including small businesses, student groups and individuals. These independent inventors are sought to generate innovative solutions for technical problems of interest to NASA and the nation and to provide them with the opportunity to stimulate or create new business ventures.

The Centennial Challenges program gathers ideas for new prize topics from the general public, industry representatives, and NASA employees. The final topics are selected based on collective agency feedback and an assessment of criteria including:

- Relevance to NASA, national and global needs
- Potential to stimulate interest and participation among competitors
- Practicality based on funding available and past experience with other competitions
- Compelling nature in terms of risks, benefits and number of potential participants
- Advocacy within NASA

Upcoming challenges in 2012 include: power beaming to a lunar rover, sample return robot challenge, Nano-satellite launch and a night rover competition.

The President's budget request includes \$10 million per year for Centennial Challenges prizes to allow further growth in the scope and range of prize competitions and even greater opportunities for the citizen-inventor to participate in NASA's research and development.

Challenge FACTS

Centennial Challenge objectives are:

Innovation

- Drive progress in aerospace technology of value to NASA's missions.
- Find innovative solutions through competition and cooperation.
- Encourage participation of teams, individuals, student groups and private companies of all sizes

Opportunity

- Leverage technology from challenge competitions for infusion into NASA missions.
- Enable Challenge competitors to develop and/or expand business models and business base.
- Enable Allied Organizations, conducting the challenges for NASA, to introduce their mission to a larger national audience
- Offer student-level competitions related to challenges

Communication

- Share Challenge results.
- Provide a forum for public outreach

Competitions are managed by independent, non-profit organizations. NASA provides the Centennial Challenge prize money.

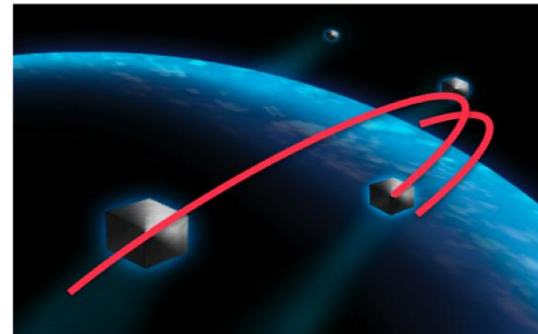
NASA's Office of the Chief Technologist in Washington manages the Centennial Challenges program. For more information on the Centennial Challenges, visit:

<http://www.nasa.gov/challenges>

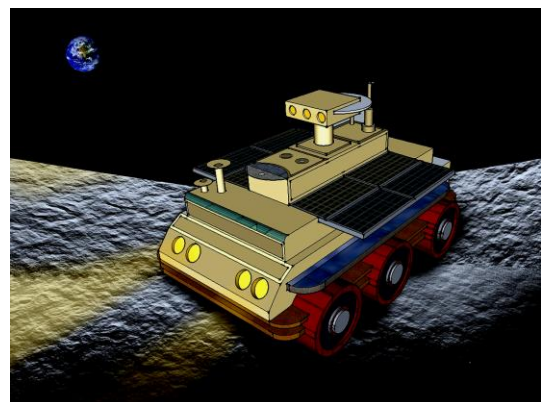
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Nano Satellite Launcher Challenge



Night Rover Challenge



Sample Return Robot Challenge