National Aeronautics and Space Administration

Centennial Challenges

Challenge FACTS

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.

What Does CCP Do?: 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.

Who Can Compete?: 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.

Prizes: The President's budget request includes $4 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.

Where do challenge ideas come from?: 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

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

NASA's Marshall Space Flight Center in Huntsville, Ala., manages the Centennial Challenges program for the Space Technology Mission Directorate in Washington, D.C.

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

Communication

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

For more information on the Centennial Challenges, visit:

http://www.nasa.gov/challenges

For more information about the Office of the Chief Technologist, visit:

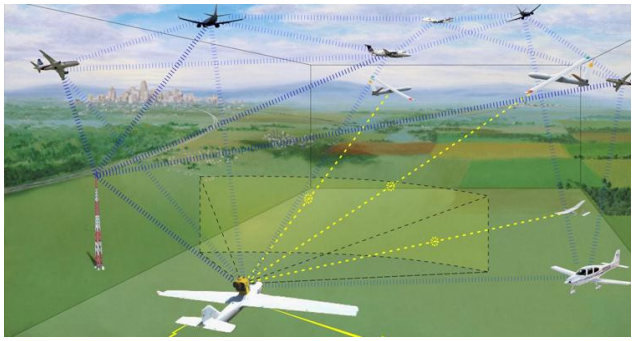
http://www.nasa.gov/oct

Centennial Challenges on Social Media:

Twitter: @NASAPrize
Facebook: www.facebook.com/nasacc
Instagram: NASAPrize

Current Challenges:

Sample Return Robot: Teams must build an autonomous robot that can traverse a natural landscape to locate and collect various samples, and return to a home platform. The challenge was run for the first time in 2012 with no winners. In 2013, Team Survey of Los Angeles, Calif., won $5,000 for completing Level 1. In June 2014, the competition will continue.
Prize money: $1.5 million



Unmanned Aircraft Systems Airspace Operations Challenge (Phase 1): In an effort to safely incorporate unmanned aircraft into commercial airspace, teams must demonstrate safe airspace operations and robustness to systems failures. The challenge will take place in September 2014 at Camp Atterbury, Ind.
Prize money: $500,000