



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.

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.

NASAfacts



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
- Continue to follow up with teams after the challenges and promote their progress and success stories. Many are invited to be exhibitors at outreach events.

For more information on the Centennial Challenges, visit:

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

For more information about how you can explore with NASA, visit:

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

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. Two teams have completed Level 1 for \$5,000. In June 2015, the competition will continue in Worcester, Massachusetts.

Prize purse: \$1.5 million



Cube Quest Challenge: Teams must design, build and deliver flight-qualified, small satellites capable of advanced operations (communication and propulsion) near and beyond the moon.

Prize purse: \$5 million



Mars Ascent Vehicle Prize:

The challenge focuses on getting the samples from a planetary surface into orbit for collection and return to Earth. It

was first competed in April 2015 in Huntsville, Alabama. Two teams were awarded a total \$40,000 for first and second places.

Prize purse: \$50,000