



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice: (20-076)]

Centennial Challenges Watts on the Moon Challenge Phase 1

AGENCY: National Aeronautics and Space Administration (NASA).

ACTION: Notice of Centennial Challenges Watts on the Moon Challenge Phase 1.

SUMMARY: The Watts on the Moon Challenge is open and teams that wish to compete may now register. Centennial Challenges is a program of prize competitions to stimulate innovation in technologies of interest and value to NASA and the nation. The Watts on the Moon Challenge is a prize competition with up to a \$5,000,000 USD total prize purse to incentivize advances in lunar power distribution, energy storage, and/or power management. At this time, NASA is opening Phase 1 of the competition, which has a \$500,000 USD prize purse. In this phase of competition, teams will develop concept proposals for technologies to address one or more “mission activities” in a hypothetical mission scenario based on anticipated mission operations and environmental features of human and robotic exploration of the lunar surface. NASA is funding the prize purse and administration of the challenge competition.

DATES: Phase 1 registration opens September 25, 2020 and will remain open until March 25, 2021. No further requests for registration will be accepted after this date.

Other important dates:

September 25, 2020	<ul style="list-style-type: none">Phase 1 registration opens
March 25, 2021	<ul style="list-style-type: none">Deadline for registration
May 20, 2021	<ul style="list-style-type: none">Phase 1 winners announced

ADDRESSES: The Watts on the Moon Challenge Phase 1 will be conducted virtually. The Challenge competitors will develop and submit their concept proposals from their own location.

FOR FURTHER INFORMATION:

To register for or get additional information regarding the Watts on the Moon Challenge, please visit: www.nasa.gov/wattson

For general information on the NASA Centennial Challenges Program please visit:

<http://www.nasa.gov/challenges>. General questions and comments regarding the program should be addressed to Monsi Roman, Centennial Challenges Program, NASA Marshall Space Flight Center Huntsville, AL 35812 at 256-544-4071. Email address: hq-stmd-centennialchallenges@mail.nasa.gov.

SUPPLEMENTARY INFORMATION:

Summary:

In the first phase of competition, teams will develop concept proposals for technologies to address one or more “mission activities” in a hypothetical mission scenario based on anticipated mission operations and environmental features of human and robotic exploration of the lunar surface. The Mission Scenario and the three associated Mission Activities are based on anticipated mission operations and environmental features of human and robotic exploration of the lunar surface. The characteristics of the Mission Scenario are purposefully intended to incentivize a wide variety of innovative technology solutions to the overall challenge of high capacity, adaptable, and reliable lunar power distribution and management systems that will be critical to the well-being and productivity of human crew and fledgling lunar surface industries.

The three Mission Activities present different combinations of power or energy capacity, distance between energy sources and the site of activity operations, mobility features, system mass limitations, and operational duty cycles that must be accommodated by teams. The activities each

specify distinct operational consumption of electrical and/or thermal energy but are open to solutions that involve conversion between one and the other. The activities are intended to be essentially independent of the nature of the energy source employed, but competitive solutions will involve identifying and incorporating assumptions about an energy source into their concept.

I. Prize Amounts

The Watts on the Moon Challenge total prize purse is up to \$5,000,000 USD (five million dollars) to be awarded across two (2) phases of competition.

Prize purse for Phase 1 will total up to \$500,000. Up to three (3) winning teams, as determined by the Judging Panel, will be awarded \$100,000 each. Up to four (4) runner-up teams will receive up to \$50,000 each.

The Prize Purse for Phase 2, should there be promising submissions in Phase 1 that demonstrate a viable approach, will be worth up to \$4,500,000.

II. Eligibility

Eligibility to Participate and Win Prize Money

To be eligible to win a prize:

- Individuals must be U.S. citizens or permanent residents of the United States and be 18 years of age or older.
- Organizations must be an entity incorporated in and maintaining a primary place of business in the United States.
- Teams must be comprised of otherwise eligible individuals or organizations and led by an otherwise eligible individual or organization.

The eligibility requirements can be found on the official challenge site: www.nasa.gov/wattson

III. Rules

The complete rules for the Watts on the Moon Challenge, can be found at: <https://www.herox.com/WattsOnTheMoon/Guidelines>

Cheryl Parker,
NASA Federal Register Liaison Officer.

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