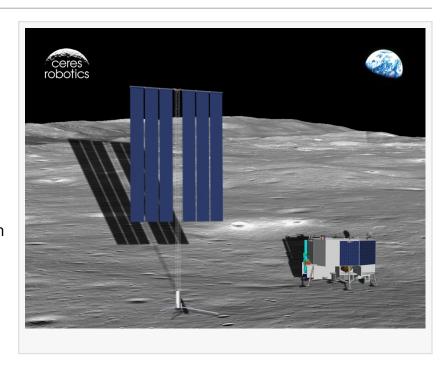


Ceres Robotics, Inc. Awarded SBIR Contract from NASA for Lunar Surface Solar Power

Ceres to Develop 50-kW Mobile Solar Truss Mast for Operation on Lunar Surface

OAKLAND, CA, USA, October 31, 2023 /EINPresswire.com/ -- Ceres Robotics, Inc. ("Ceres") has been selected by NASA to develop a 50-kW reliable and sustainable power source to support lunar habitats, rovers, and construction systems for future robotic and crewed lunar missions under the Lunar Surface 50 kW-Class Solar Array Structures SBIR Phase I topic. The 50-kW Mobile Solar Truss Mast is the second generation to the 10-kW



Vertical Solar Array Technology (VSAT) contracts awarded in 2021 to multiple firms under NASA's Game Changing Development project.

"Clean and mass efficient power in significant quantities is a ubiquitous need of surface operations", said <u>Udit Shah</u>, Principal Investigator of this SBIR and technical program lead at Ceres. "With the focus on returning humans to the Moon and establishing a sustainable presence at the lunar South Pole, Ceres is positioned to deliver to NASA a cost-effective approach to the 50-kW VSAT. Our team of designers, engineers, and mission operations specialists, with flight-proven experience in planetary flight missions, was awarded the SBIR contract based on the proposed design and its merits."

Ceres' VSAT will support NASA's Artemis program by extending the life of missions and maximizing science output for polar missions, support human missions and habitats, and meet power needs for ISRU, lunar bases, infrastructure, landers, and rovers. It will be the driver for keeping overall systems costs lower for future missions.

Ceres is working on structures and mechanisms innovations to ensure compact packaging, safe transportation in space and on the lunar surface, reliable deployment, stable operation while

sun tracking, and retraction and relocation as needed. The backbone of Ceres' 50 kW VSAT is the C-Tower, a deployable-retractable truss-mast to commission solar arrays. C-Tower is lightweight, can extend up to 90 feet high, and retract for relocation if necessary. The overall system can generate up to 60 kW of power.

Ceres is a commercial vendor selected by NASA to provide payload delivery services to the lunar surface through the Commercial Lunar Payload Services (CLPS) program. In support of NASA CLPS, Ceres is developing its mission configurable B5 lander bus capable of precision landing and providing NASA with end-to-end lunar payload delivery and operations services. Ceres B5 lander bus can deliver up to 1000 kg payloads to the lunar surface and provides payloads with power, data, communications, articulation, and surface and orbital deployment to perform their individual missions.

"Ceres is ideally suited to support NASA's mission to return astronauts to the surface of the Moon, and ultimately Mars," said Dr. <u>Michael Sims</u>, founder and CEO. "We look forward to leveraging our commercial capacity to not only design and develop the VSAT system, but to one day operate on it the lunar surface along with our robotic lander and rover systems."

Ceres Robotics, Inc. is a new-space commercial company focused on building the tools enabling humanity becoming a multiplanetary species. Ceres is disrupting the cost of carrying out planetary surface activities by combining modern technologies with lean, agile development. Ceres builds and supplies landers, rovers, surface robotics elements, and operations to enable and package full service affordable and high-impact missions in a 'Missions as a Service' model to NASA and for other customers. Ceres was founded in 2017 by NASA veteran Dr. Michael Sims, is currently operated by three Edmund Hillary Fellows, and is located in California.

If you would like more information about this announcement, please contact Mr. Udit Shah, Ceres senior engineer and program manager at udit.shah@ceresrobotics.com.

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