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Redwire to Develop First Commercial Space Greenhouse to Improve Crop Science on Earth and Support Future Space Exploration Missions

JACKSONVILLE, Fla.--(BUSINESS WIRE)-- Redwire Corporation (NYSE: RDW), a leader in space infrastructure for the next generation space economy, announced today that it will be developing the only commercially owned and operated spaceflight-qualified plant growth platform capable of growing plants from seed to maturity in space. Redwire Greenhouse, scheduled to launch to space no earlier than spring 2023, will be the first-ever commercially owned greenhouse installed on the International Space Station (ISS). Commercial agricultural technology company Dewey Scientific is expected to be Redwire's customer for the inaugural flight. Redwire Greenhouse will deliver valuable insights for crop scientists on Earth and significantly expand humanity's ability to grow full crops in space.

"Redwire Greenhouse will expand opportunities for scientific discovery to improve crop production on Earth and enable critical research for crop production in space to benefit future long-duration human spaceflight," said Dave Reed, Redwire Florida Launch Site Operations Director and Greenhouse project manager. "Growing full crops in space will be critical to future space exploration missions as plants provide food, oxygen and water reclamation. Increasing the throughput of crop production research in space, through commercially developed capabilities, will be important to deliver critical insights for NASA's Artemis missions and beyond."

The Redwire Greenhouse will provide a simple, scalable commercial solution for customers seeking to advance crop science from benchtop laboratory facilities to true production in space. Along with supporting long-term NASA exploration plans, the Redwire Greenhouse also will provide unprecedented accessibility to institutional and commercial customers with various plant science and industrial research goals. Its 2023 in-space demonstration will validate the facility's concept of operations and evaluate its lighting, ventilation and leaf litter containment capabilities.

During the inaugural flight, Dewey Scientific will grow industrial hemp in the Greenhouse for a gene expression study. The company collaborated with Redwire, contributing technical details about the 60-day experiment and describing its potential to demonstrate the capabilities of the facility, while advancing biomedical and biofuels research.

"Building on our long track record of partnering with commercial organizations like Tupperware, Eli Lilly and now Dewey Scientific, Redwire Greenhouse is another groundbreaking step forward in Redwire's demonstrated leadership in establishing a viable commercial economy in low-Earth orbit. Through partnerships with Redwire, space is open for business," said John Vellinger, Redwire's Executive Vice President of In-Space

Manufacturing and Operations.

The Redwire Greenhouse will leverage already flight-qualified Redwire plant growth technology, including Passive Orbital Nutrient Delivery System (PONDS) devices developed in partnership with Tupperware Brands and currently operated by Redwire on the ISS. Larger, scalable versions of the Greenhouse can be flown for customers with varying crop-growing requirements or alternate plant support systems. Besides PONDS, Redwire has managed plant investigations in the NASA-owned Advanced Plant Habitat since 2018.

The Redwire Greenhouse is being developed through an award from the Center for the Advancement of Science in Space, manager of the ISS U.S. National Laboratory.

About Redwire

Redwire Corporation (NYSE: RDW) is a leader in space infrastructure for the next generation space economy, with valuable IP for solar power generation and in-space 3D printing and manufacturing. With decades of flight heritage combined with the agile and innovative culture of a commercial space platform, Redwire is uniquely positioned to assist its customers in solving the complex challenges of future space missions. For more information, please visit www.redwirespace.com.

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