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Redwire Providing Navigation and Power Technology for NASA's First Planetary Defense Mission

JACKSONVILLE, Fla.--(BUSINESS WIRE)-- Redwire Corporation (NYSE: RDW), a leader in space infrastructure for the next generation space economy, is providing critical navigation components and roll-out solar array (ROSA) technology for NASA's Double Asteroid Redirection Test (DART) mission, the world's first planetary defense test mission. The mission is set to launch no earlier than November 23 at 10:20 p.m. PST from Vandenberg Space Force Base in California.

Redwire delivered two Roll-Out Solar Arrays (ROSA) for the DART program through a contract with Johns Hopkins Applied Physics Laboratory (APL). The two solar arrays, which each unfurl to 28 feet when fully deployed, will power the entire spacecraft. The arrays will feature Redwire's Flexible Array Concentrator Technology (FACT) Solar Power Modules, which use high efficiency SolAero Inverted Metamorphic Module 4J Photovoltaic solar cells, as a Transformational Solar Array demonstration. Redwire also delivered a Digital Sun Sensor system consisting of five Digital Sun Sensor heads and one Digital Sun Sensor electronics processing unit, which will be used for attitude control and fail-safe recovery throughout the mission.

"Redwire is proud to partner with APL and NASA on this historic mission and it's incredibly exciting to see our technology used to advance Earth's planetary defense capabilities," said Andrew Rush, President and COO of Redwire. "As a critical mission partner, we are leveraging our innovative, flight-proven technology to enable truly game-changing missions, like DART, that are expanding our understanding of the solar system and ushering in an exciting new era of exploration."

DART will be the first demonstration of the kinetic impactor technique to change the motion of an asteroid in space. The DART spacecraft will travel millions of miles to a binary asteroid, Didymos, where it will crash into its moonlet to adjust its speed and trajectory. As humankind's first planetary defense mission, DART will demonstrate critical technology that could one day be used to protect Earth from a dangerous asteroid or comet.

First demonstrated on the International Space Station (ISS) in 2017, Redwire's ROSA technology is compact, modular and scalable, making it ideal for use on various spaceflight platforms. In June 2021, two ROSA arrays were successfully installed and deployed on the ISS to provide a critical power boost, and four more arrays under contract with Boeing will be installed over the next two years. Redwire is also producing various modular versions of ROSA for many government and commercial spaceflight applications, including Maxar's Power and Propulsion Element for NASA's Gateway program and the Ovzon 3 GEO spacecraft for Maxar's Legion-class satellites.

Redwire's Digital Sun Sensor has a rich flight heritage and is valued for its accuracy, durability, and compact and lightweight design. Other missions and spacecraft the Digital Sun Sensors have supported include: Mars Pathfinder, Mars Exploration Rovers A and B, Mars Science Lander Curiosity, Mars 2020 Perseverance, IRIS, and Cassini-Huygens.

Building on decades of flight heritage combined with new space technology, Redwire's advanced sensors and components are enabling unparalleled navigation and power generation capabilities, providing more flexibility and capability on-orbit with more processing power and smaller form factors.

To learn more about Redwire's involvement in this historic mission, visit www.redwirespace.com.

About Redwire

Redwire Corporation (NYSE: RDW) is a leader in mission critical space solutions and high reliability components 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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