NASA Awards Paragon with an STTR Phase I For Spacecraft Habitat Wastewater Recycling System

TUCSON, (AZ) (May 02, 2016) – Paragon Space Development Corporation® (Paragon) and partner Texas Tech University (TTU) received a Phase I Small Business Technology Transfer (STTR) award from NASA to develop the Integrated Water Recovery Assembly (IRA), a spacecraft wastewater recycling system that will provide the long-term support necessary to explore beyond Earth orbit.

The Integrated Water Recovery Assembly (IRA) is designed to meet NASA’s stringent requirements and constraints. IRA will reduce consumable consumption by removing the need for hazardous chemical pretreatment and likely eliminate the need for inefficient liquid water based processes (e.g. ion exchange) now used to reach potable standards. The technology will be applicable to NASA as well as other commercial applications.

“Simple yet robust water recycling systems are critical for not only space exploration but also disaster relief, military support, and industrial water remediation. Together with TTU we will integrate the necessary technologies and advance the state-of-the-art in wastewater recycling” said Barry Finger, Paragon’s Chief Engineer and the Principal Investigator for this project.

“IRA will be less complex, require far fewer consumables, and be more sustainable than current spacecraft wastewater recovery systems. Phase I findings will establish the basis for the water recycling solution needed for future long-duration missions to the Moon and Mars,” added Dr. Andrew Jackson of TTU.

For the 2016 SBIR/STTR solicitation, NASA received 1,278 proposals of which it selected 399 for contract negotiation.

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Texas Tech University is one of the nation’s premier research institutions.
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For more information: http://sbir.gsfc.nasa.gov/SBIR/abstracts/16/sttr/phase1/STTR-16-1-T6.03-9824.html