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Ad Astra Rocket Company in Orbital ATK Team Selected for NASA's second Research and Technology for Aerospace Propulsion Systems (RTAPS) Contract

[Webster, Texas – for immediate release] – Ad Astra Rocket Company is part of a team, led by Orbital ATK, selected by NASA for the RTAPS2 Contract. RTAPS2 provides a contractual vehicle by which selected industry partners can develop, demonstrate and verify advanced propulsion system technologies in support of NASA's aerospace research programs. NASA developed the RTAPS2 Contract as part of its ongoing, long-term aerospace research activities at the agency's Glenn Research Center in Cleveland, Ohio. The competitive process was initiated in the spring of 2015 and concluded in late July.

The Orbital ATK team will research and develop space propulsion technologies that enable higher mission performance, reduced cost, improved operability and reliability, and greater safety. Elements of the space propulsion award include liquid engine systems, propellant systems, electric propulsion and rocket-based combined cycle. Ad Astra is participating in three of the six elements of Space Propulsion, including Propulsion System Design and Trade Studies, Electric Propulsion and Advanced Propulsion Systems.

Ad Astra's expertise in electric propulsion systems, trajectory design and analysis, as well as the company's state of the art fabrication, vacuum and laboratory facilities will enable the design, fabrication and testing of thruster components and thrusters. Its analytical and diagnostic tools and physics-based modeling will be able to evaluate and test the technical maturity of electric propulsion subsystems and systems, including cost, risk, reliability, performance and life.

"We are proud to be a part of the Orbital ATK team," said Dr. Franklin R. Chang Díaz, Ad Astra's Chairman and Chief Executive Officer. "We look forward to contributing our skills and expertise to



help advance the technology readiness of electric and advanced propulsion systems," he added.

ABOUT AD ASTRA

A US Delaware corporation established in 2005, Ad Astra Rocket Company is the developer of the VASIMR[®] engine, an advanced plasma space propulsion system aimed at the emerging in-space transportation market. Ad Astra also owns and operates supporting research and development subsidiaries in the US and Costa Rica. Through its subsidiaries, the company also develops earthbound high technology applications in renewable energy, advanced manufacturing and applied physics. Ad Astra has its main laboratory and corporate headquarters at 141 W. Bay Area Boulevard in Webster, Texas, USA, about two miles from the NASA Johnson Space Center.

ABOUT ORBITAL ATK

Orbital ATK is a global leader in aerospace and defense technologies. The company designs, builds and delivers space, defense and aviation systems for customers around the world, both as a prime contractor and merchant supplier. Its main products include launch vehicles and related propulsion systems; missile products, subsystems and defense electronics; precision weapons, armament systems and ammunition; satellites and associated space components and services; and advanced aerospace structures. Headquartered in Dulles, Virginia, Orbital ATK employs more than 12,000 people in 18 states across the U.S. and in several international locations. For more information, visit www.orbitalatk.com