



NASA to Demonstrate New “Green” Propellant in Space Using Aerojet Rocketdyne Propulsion System

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- NASA’s *Green Propellant Infusion Mission (GPIM)* will demonstrate in space for the first time a new non-toxic propellant offering nearly 50% higher performance over traditional monopropellant fuel
- Aerojet Rocketdyne’s specially-engineered propulsion system for the “green” propellant, called *AF-M315E*, is the sole means of onboard propulsion for the spacecraft
- *AF-M315E* has a higher performance level and other operational advantages, making it a viable fuel option for various next-generation spacecraft

REDMOND, Wash., June 20, 2019 (GLOBE NEWSWIRE) -- Aerojet Rocketdyne, along with NASA, Ball Aerospace and the Air Force Research Laboratory (AFRL), is helping usher in a new era of small satellite propulsion through the Green Propellant Infusion Mission (GPIM). On June 24, a Ball Aerospace small satellite will be launched from NASA’s Kennedy Space Center in Cape Canaveral, Florida. Once in orbit, the spacecraft will conduct a 13-month demonstration of a revolutionary “green” propellant developed by the AFRL, called AF-M315E.

Powered by this green propellant, Aerojet Rocketdyne’s green propellant propulsion system will enable the spacecraft to execute and demonstrate orbital maneuvers in space. The system includes five 1-newton thrusters: four for attitude control and one for orbit maneuvering. This will be the first space-based demonstration of Aerojet Rocketdyne’s green propulsion technology utilizing AF-M315E propellant.

“Aerojet Rocketdyne has provided trusted and reliable in-space propulsion to industry, government and commercial partners since the beginning of the space age,” said Eileen Drake, CEO and president of Aerojet Rocketdyne. “We’re excited to expand upon this legacy with our new green propulsion technology, which will enable increased satellite performance and provide propulsion options to SmallSats that previously weren’t available.”

AF-M315E is a higher performance and environmentally-friendly alternative for chemical propulsion operations that traditionally use hydrazine. Because of its increased density and higher performance, satellites can achieve extended operation timelines and increased maneuverability. Its lower freezing point eliminates the need for added onboard heating systems, resulting in a greater mass allowance for added life. Green propellant is also non-toxic, which enables safe handling of the propellant and simplifies pre-launch processing.

NASA is interested in using green propellant for various next-generation spacecraft and launch vehicles to the Moon, Mars and beyond. Proving this new technology is effective and efficient in space will open the door for green propulsion to become a viable option for future missions. Aerojet Rocketdyne’s green propellant propulsion system was developed at the company’s Redmond, Washington, facility.

About Aerojet Rocketdyne: Aerojet Rocketdyne, a subsidiary of Aerojet Rocketdyne Holdings, Inc. (NYSE:AJRD), is a world-recognized aerospace and defense leader that provides propulsion systems and energetics to the space, missile defense and strategic systems, and tactical systems areas, in support of domestic and international customers. For more information, visit www.Rocket.com and www.AerojetRocketdyne.com. Follow Aerojet Rocketdyne and CEO Eileen Drake on Twitter at [@AerojetRdyne](https://twitter.com/AerojetRdyne) and [@DrakeEileen](https://twitter.com/DrakeEileen).

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