



Aerojet Rocketdyne Propulsion Powers the Fourth U.S. Air Force Advanced Extremely High Frequency Satellite Mission

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- *Aerojet Rocketdyne supports the Air Force's critical communications network, from the launch pad of United Launch Alliance's Atlas V rocket to orbit to final end-of-life decommissioning of the satellite system.*
- *Aerojet Rocketdyne chemical and electric propulsion onboard the AEHF satellites provide orbit raising, stationkeeping, attitude control, and repositioning capabilities.*
- *Compared to all chemical propulsion, AR's electric propulsion results in a savings of more than 2,000 lbs. of propellant, reducing launch costs.*

CAPE CANAVERAL AIR FORCE STATION, Fla., Oct. 18, 2018 (GLOBE NEWSWIRE) -- Aerojet Rocketdyne propulsion continues to support the Air Force's protected communications satellite network, the Advanced Extremely High Frequency (AEHF) system, with the successful launch of the fourth satellite of its constellation on October 17. The Lockheed Martin-built AEHF-4 will join its predecessors in providing critical connectivity for U.S. Armed Forces and military operations. Aerojet Rocketdyne propulsion is present on both AEHF-4 and the United Launch Alliance (ULA) Atlas V rocket that launched the spacecraft.

According to Lockheed Martin Space, "the AEHF satellite system delivers global connectivity and protected communications to national leaders and armed forces, 24 hours a day, through a secure constellation. Satellites are jam-resistant, highly-survivable and allow for critical information to be transmitted on ground, air and sea platforms." This fourth satellite will round out the backbone of the network, which will gain another two satellites to complete the six-satellite system.

"Seamless and secure communication is vital to the effectiveness and safety of our servicemen and women across the globe," said Aerojet Rocketdyne CEO and President Eileen Drake. "Aerojet Rocketdyne plays a critical role in supporting the Air Force's communications network, from helping launch the satellites into Geostationary Earth orbit, to providing mission-enabling propulsion capabilities onboard the satellites throughout the mission."

Aerojet Rocketdyne supports the AEHF-4 mission from the launch pad to orbit to final end-of-life decommissioning of the satellite. Starting with the launch vehicle – Aerojet Rocketdyne provides the AJ-60A solid rocket motors that helped boost United Launch Alliance's Atlas V off the launch pad; the pressure vessels that support the first and second stages of the launch vehicle; the RL10 liquid hydrogen/liquid oxygen engine that provides thrust to power the Centaur upper stage, and MR-106 Reaction Control System thrusters, which provide pitch, yaw and roll control for the Centaur upper stage, as well as settling burns.

Onboard the AEHF-4 space vehicle, Aerojet Rocketdyne provides electric XR-5 Hall Thruster strings and monopropellant rocket engines which enable nearly all propulsive functions throughout the life of the satellite. One XR-5 Hall Thruster string consists of an XR-5 Hall Thruster, a xenon flow controller (XFC) and the power processor that drives and controls the thruster and XFC. The XR-5 Hall Thrusters on AEHF enable a propellant mass savings in excess of 2,000 lbs. when compared to performing the mission with all chemical propulsion.

The five AJ-60A solid rocket booster motors that supported the mission were designed and built at the company's facility in Sacramento, California, while the company's facility located in West Palm Beach, Florida, provides the RL10 engine. Aerojet Rocketdyne's Redmond facility developed and manufactured the electric and chemical thrusters on the space vehicle, as well as the reaction control thrusters on the Centaur upper stage. Pressure vessels for the Atlas V were manufactured by ARDÉ, a subsidiary of Aerojet Rocketdyne, based in New Jersey.

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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