

**PRESS RELEASE: FOR IMMEDIATE DISTRIBUTION**

**Millennium Space Systems adds a new flight-proven ALTAIR™ spacecraft to its family of heritage spacecraft through a successful on-orbit deployment from NanoRacks commercial launch service**



ALTAIR™ Pathfinder deploys from the NanoRacks CubeSat Deployer on May 17, 2017. Image source: NASA

EL SEGUNDO, Calif., June 19, 2017: Millennium Space Systems announces the successful deployment and operation of its first of many planned ALTAIR™ Pathfinder spacecraft on orbit. The ALTAIR™ Pathfinder was designed to demonstrate the latest innovations in avionics, guidance & control, additive manufacturing, power systems, RF communications and onboard processing technologies. Thanks to the National Aeronautics and Space Administration (NASA) Johnson Space Center (JSC) and Houston-based NanoRacks LLC, the ALTAIR™ Pathfinder was deployed on-orbit from the NanoRacks CubeSat Deployer (NRCSD) commercial launch service on May 17, 2017, and has been operating nominally. The deployment opportunity was made available by NanoRacks via its Space Act Agreement with NASA's U.S. National Lab. The ALTAIR™ Pathfinder has achieved early on-orbit mission objectives in a three-week span. In the fall of 2016 Millennium Space Systems expanded its state-of-the-art factory to support high-volume manufacturing of the ALTAIR™ Pathfinder.

“The ALTAIR™ Pathfinder technology demonstrator mission objective achievements to date are proof to our National Security Space and NASA customers that Millennium Space Systems is capable of achieving on-orbit success at very affordable price points on extremely fast schedules regardless of the many obstacles on a flight program,” said Mr. Griffith Russell, Millennium Space Systems’ ALTAIR™ Pathfinder Mission Director. “Additionally, through specialized space-to-ground-segment operational guidelines, our crew has forged a highly integrated relationship with NASA JSC, NASA Marshall Spaceflight Center, NanoRacks and Swedish Space Corporation during this foundational early on-orbit check-out period, which significantly lowers risk for our multiple follow-on ALTAIR™ spacecraft on-orbit deliveries in 2018.”

ALTAIR™ Pathfinder follows the success of Millennium Space Systems’ high-reliability, high-performance AQUILA™ spacecraft platform line. The ALTAIR™ platform targets the growing demand for larger, affordable constellations in support of more resilient, technologically advanced and persistent architectures for National Security Space and NASA missions.

The ALTAIR™ Pathfinder has achieved the following mission objectives:

- Delivery of ALTAIR™ Pathfinder from design to launch readiness in less than 12 months
- Successful deployment from NRCSD commercial launch service
- Successful on-orbit check-out of essential bus equipment including the S-band radio, solar array deployment mechanisms, and thermal, power, command data handling (CDH), Guidance Navigation and Control (GNC) and peripheral interface controller (PIC)/MAST payload subsystem hardware
- Successful demonstration of the onboard flight control software subsystem including execution of GNC control algorithms and critical load shed capabilities
- Flight heritage for the internally developed core avionics of the ALTAIR™ platform line, which include the flight computer, level zero controller, power switching, low-SWaP star tracker and high performance PIC 1.0 onboard processor
- Flight heritage for the third-party inertial measuring unit (IMU), three access magnetometer (TAM), reaction wheel assembly (RWA), batteries and GPS receiver
- Successful first flight of PEKK 3D-printed structure
- Successful ALTAIR™ Pathfinder mission operations center execution in collaboration with Swedish Space Corporation’s commercial ground service, NASA JSC and NASA Marshall Spaceflight Center coordination, and USAF Joint Space Operations Center (JSpOC) support

“In December of 2015, our senior leadership challenged the company to be more innovative, more affordable and more schedule responsive than we have ever been before,” said Mr. Eric Hertz, Millennium Space Systems’ ALTAIR™ Pathfinder Flight Director. “Eighteen months later we have culminated with on-orbit operations of a brand-new ALTAIR™ spacecraft platform that, like our AQUILA™ spacecraft platforms, will meet and exceed customer demands for a lower price point and rapid delivery. We continue to perform new demonstrations on the ALTAIR™ Pathfinder as it transitions to residual operations.” With both the flight-proven AQUILA™ and ALTAIR™ platforms, Millennium Space Systems offers options for low-risk, affordable, schedule responsive, complete mission solutions for any orbit, mission and launch vehicle configuration.

**ABOUT MILLENNIUM SPACE SYSTEMS**

Millennium Space Systems is a privately held, employee-owned company founded in 2001 providing alternative, affordable solutions to today’s aerospace challenges. The company designs flight systems and develops mission and system solutions for the intelligence community, Department of Defense, NASA and commercial customers.

More information about Millennium Space Systems: [www.millennium-space.com](http://www.millennium-space.com).

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