

NASA's micro-satellites complete mission

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NASA says its three orbiting micro-satellites known as Space Technology 5 have completed their planned 90-day mission and will conclude operations.

The mission focused on testing miniaturized satellites in the harsh environment of space and evaluating their ability to make research-quality scientific measurements.

The satellites were launched March 22. Each satellite, about the size of a 13-inch TV set, weighs approximately 55 pounds.

A major test occurred when the spacecraft assumed a constellation formation May 24, lining up in nearly identical orbits, like three pearls on a necklace, approximately 220 miles apart. Reaching formation required seven maneuvers using miniaturized micro-thrusters.

NASA says the mission -- which is scheduled to end Friday -- demonstrated the benefits of using a constellation of spacecraft to perform scientific space studies at the same time, but in varying locations.

The mission also demonstrated an innovative communications technology. The satellites used miniature spacecraft radio transponders for space-to-ground communications and tracking. Scientists said the transponders -- coupled with conventional and computer-optimized or -evolved antennas -- performed flawlessly.

The project is part of NASA's New Millennium Program, which develops and tests high-payoff technologies that provide future science mission capabilities with reduced cost and risk.

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