

photo by Emmett Given

Marshall Team Complete Testing for Lunar Atmosphere and **Dust Environment Explorer**

Dr. Huu Trinh and his team with the Propulsion Systems and Test Departments at Marshall Space Flight Center in Huntsville, Ala. successfully complete a simulated cold-flow test series on the propulsion system used for the Lunar Atmosphere and Dust Environment Explorer (LADEE) spacecraft. NASA Ames Research Center, Moffett Field, Calif., is leading NASA's work on the development of the LADEE spacecraft, and the Marshall center is the program office for the project. The spacecraft, scheduled for launch this fall, will orbit the Moon and gather information about the lunar atmosphere, conditions near the surface of the Moon, and collect samples of lunar dust. A thorough understanding of these characteristics will address long-standing unknowns, and help scientists understand other planetary bodies as well. The test team at the Marshall center conducted the cold flow test to identify how the

fluid flows through the propulsion system feed lines, especially during critical operation modes. The test data will be used to assist the LADEE team in identifying any potential flow issues in the propulsion system, and allow them to address and correct them in advance of the launch.