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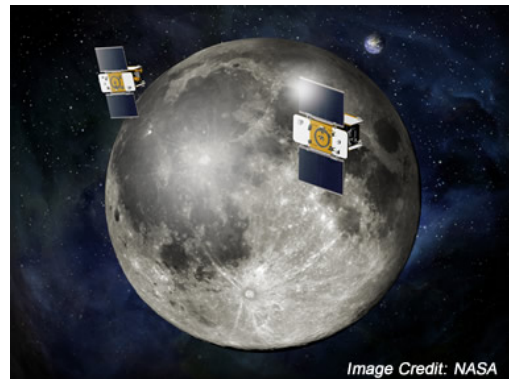
## **DUNMORE Protects NASA's Twin GRAIL Satellites as they Map the Moon's Gravity**

*Company's Multi Layer Insulating Films Shield Instruments from Radiation and Temperature*

**Bristol, Pa., Sept. 7, 2011** – As NASA's two GRAIL satellites circle the moon, mapping its gravitational field in detail for the first time, DUNMORE [multi-layer insulation \(MLI\) materials](#) will protect their sensitive internal systems from the temperature changes and radiation of open space.

The nearly identical GRAIL satellites will circle the moon in parallel orbits. They will move closer together or farther apart as their instruments detect changes in the moon's gravitational field. Instruments will record the changes in their velocities and turn the data into a high-resolution map of the moon's gravitational field, which could help scientists better understand its effects on the Earth. Each spacecraft will also carry a set of cameras for the educational program MoonKAM, marking the first time a NASA planetary mission has carried instruments expressly for an education and public outreach project.

GRAIL's instruments, so sensitive that they can measure distance changes between the spacecrafts of only a few microns, are surrounded by DUNMORE's multi-layer insulation (MLI) materials. Ultra light, flexible but durable, DUNMORE MLI can replace heavier materials such as metals and composites used to shield sensitive space-based systems from cold, debris and radiation. DUNMORE MLI materials are in NASA's Juno project to map Jupiter's magnetic field and were fixtures in the Space Shuttle program. DUNMORE has supplied protective materials to the current generation of GPS satellites and will be supplying to the next-generation GPS III program, which will encompass a minimum of 30 new satellites. DUNMORE materials can also be found on the Hubble Space Telescope and most recently launched NASA/JPL Aquarius spacecraft. DUNMORE is also supplying MLI materials to the Mars Science Laboratory project which plans to land a large exploratory rover on the planet's surface.



“NASA's new generation of programs to expand our knowledge of the universe will spark imaginations like the original space programs did from the 1950s through the '90s,” said DUNMORE Vice President John Jordon. “Having a role in these programs makes us feel like we're helping to make history.”

### **About DUNMORE**

DUNMORE Corporation is a global supplier of engineered coated and laminated films. DUNMORE offers film conversion services such as coating, metallizing and laminating along with contract film manufacturing. DUNMORE produces coated film, metallized film and laminating film substrates for the photovoltaic, graphic arts, packaging, aerospace, insulation, surfacing and fashion industries. DUNMORE is privately held, ISO 9001:2008 and OSHA VPP Star certified. For complete information on DUNMORE's products, services and industries served, please visit DUNMORE's website <http://www.dunmore.com/>.

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