

Columbia Sportswear and Intuitive Machines Expand Scientific Partnership with Upcoming Lunar Mission

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Intuitive Machines will employ two of Columbia's patented technologies to help protect its lunar lander from extreme temperatures in space

LONDON.20.FEB -- Columbia Sportswear (<https://www.columbia.com/>) continues to test the limits of its innovative technologies by expanding its partnership with space exploration company Intuitive Machines ahead of its historic second lunar launch later this month. Columbia's Omni-Heat™ Infinity and Omni-Shade™ Sun Deflector technologies will help protect the lander from the extreme cold and hot temperatures in space and on the Moon. The goal of the mission to the Moon's south pole is to drill into the surface to find lunar ice, a feat that has never been attempted in this inhospitable environment.

Following last year's successful IM-1 mission that incorporated Columbia's Omni-Heat Infinity insulation technology, Columbia and Intuitive Machines have worked closely together to design and test thermal management materials that fully integrate Columbia's Omni-Heat Infinity technology, plus an additional technology called Omni-Shade Sun Deflector, into the IM-2 lander, Athena. Omni-Heat Infinity heat-reflective insulation will help protect part of the lander from freezing cold temperatures, while Omni-Shade Sun Deflector technology will help shield part of Athena from the sun's extreme heat in space and on the lunar surface.

"During the IM-1 mission, we demonstrated the insulative power and durability of our Omni-Heat Infinity technology to help protect the lander – the same insulation used in our winter jackets and gear. While we celebrated this historic moment, we knew it was just the first step in unlocking the true potential of Columbia's patented innovations," said Dr. Haskell Beckham, Vice President of Innovation at Columbia Sportswear. "Through this scientific partnership, we have been able to stretch the boundaries of material and product testing to the furthest frontiers, reinforcing our commitment to delivering some of the most innovative outdoor solutions in the world."

Athena will face extreme heat from the sun as it conducts experiments on the lunar surface. Columbia's Omni-Shade Sun Deflector technology, a patented material developed to shield people from the intense heat from the sun, will be integrated into a multilayer insulation (MLI) blanket covering the top deck of the lander. Columbia's technology will help keep the lander cooler to prevent overheating by reflecting solar radiation away from Athena's essential batteries and avionics. On Earth, Omni-Shade Sun Deflector material is featured in several warm-weather products and uses reflective dots of titanium dioxide to deflect the hot rays of the sun away from the body, which mitigates heat build-up to help people feel cooler outdoors.

As it did for the IM-1 mission, Columbia's award-winning Omni-Heat Infinity technology will again be used, this time to insulate the helium tank on Athena, helping protect it against temperatures ranging from approximately +250° to -250° Fahrenheit as Athena journeys through space and during the lander's

operational phase on the lunar surface.

“We proudly join Intuitive Machines on this second historic lunar mission, furthering their goal to return humans to the Moon, and lending our engineered materials to the cause,” said Joe Boyle, Brand President at Columbia Sportswear. “From our headquarters in Portland, Oregon all the way to the surface of the Moon, we can confidently say our products undergo the most rigorous testing to ensure they meet the highest standards of performance. This partnership has allowed us to fearlessly experiment and employ our technologies in the most extreme environments, advancing our shared commitment to human exploration on Earth and beyond.”

As part of NASA’s Commercial Lunar Payload Services (“CLPS”) initiative, a key part of NASA’s Artemis lunar exploration efforts, Intuitive Machines’ IM-2 mission is set to demonstrate lunar mobility, resource prospecting, and analysis of volatile substances from subsurface materials. This is a critical step toward uncovering water sources beyond Earth—a key component for establishing sustainable infrastructure both on the lunar surface and in space.

Liftoff of the IM-2 lunar mission is targeted for a multi-day launch window that opens no earlier than February 26 from NASA’s Kennedy Space Center and the mission will be streamed live on NASA TV and <https://www.intuitivemachines.com/im-2> (<https://www.intuitivemachines.com/im-2>).

“Space and Earth are part of an innovation ecosystem where progress in one fuels advancement in the other,” said Steve Altemus, President and CEO of Intuitive Machines. “By continuing our partnership with Columbia Sportswear, we’re proving that commercial innovation can break engineering barriers, supporting new industries on the Moon while driving technological advancements that reshape markets on Earth.”

For high-resolution images, video, and more information on the partnership between Columbia and Intuitive Machines, please visit [here](https://wetransfer.com/downloads/4209bce6f6032ff82b7b2bf469cde90920250220101505/dc4ce8?t_exp=1740651305&t_lsid)

(https://wetransfer.com/downloads/4209bce6f6032ff82b7b2bf469cde90920250220101505/dc4ce8?t_exp=1740651305&t_lsid)

About Columbia Sportswear:

Columbia, the flagship brand of Portland, Oregon-based Columbia Sportswear Company, has been creating innovative apparel, footwear, accessories, and equipment for outdoor enthusiasts since 1938. Columbia has become a leading global brand by channeling the company’s innovative spirit and passion for the outdoors into technologies and performance products that keep people warm, dry, cool and protected year-round. To learn more, please visit the company’s website at www.columbia.com (<https://www.columbia.com/>).

About Intuitive Machines:

Intuitive Machines is a diversified space exploration, infrastructure, and services company focused on fundamentally disrupting lunar access economics. In 2024, Intuitive Machines successfully landed the Company’s Nova-C class lunar lander, Odysseus, on the Moon, returning the United States to the lunar

surface for the first time since 1972. The Company's products and services are offered through its four in-space business units: Lunar Access Services, Orbital Services, Lunar Data Services, and Space Products and Infrastructure. For more information, please visit [intuitivemachines.com](https://www.intuitivemachines.com) (<https://www.intuitivemachines.com/im-2>).

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