# Goodyear Joins Lockheed Martin To Commercialize Lunar Mobility

*Vehicle Tires Designed for Extreme Temperatures in One Sixth Gravity on Crater-Filled Terrain*

*Goodyear is bringing decades of experience to next-gen lunar mobility vehicles.*

**DENVER, July 20, 2022** – The Goodyear Tire & Rubber Company supplied essential products for NASA's Apollo program, including the Apollo 11 mission which landed on the Moon 53 years ago today. The company will continue that tradition—focusing on lunar vehicle tires—by joining Lockheed Martin (NYSE:LMT) in its development of a lunar mobility vehicle.

Since Apollo, Goodyear continued innovating alongside NASA to advance designs for a lunar vehicle tire. The team of companies intends to be the first to establish extended-use commercial vehicle operations on the Moon. Goodyear brings its vast expertise in a mission-critical component to traverse the lunar surface, tires.

"NASA's Artemis program to live and work on the Moon has a clear need for lunar surface transportation that we intend to meet with vehicles driven by astronauts or operated autonomously without crew," said Kirk Shireman, vice president of Lunar Exploration Campaigns at Lockheed Martin. "We're developing this new generation of lunar mobility vehicle to be available to NASA and for commercial companies and even other space agencies to support science and human exploration. This approach exemplifies NASA's desire for industry to take the lead with commercial efforts that enable the agency to be one of many customers."

Goodyear is drawing from its advanced airless tire technology used on Earth with micro-mobility, autonomous shuttles and passenger vehicles, to advance lunar mobility and withstand the challenging conditions on the Moon. The companies are already applying existing expertise to the project including testing concepts in lunar soil test beds.

"Everything we learn from making tires for the Moon's extremely difficult operating environment will help us make better airless tires on Earth," said Chris Helsel, senior vice president, Global Operations and Chief Technology Officer at Goodyear. "This will contribute to our end goal of enabling mobility no matter where it takes place. Just as important, it is an honor to write history with these two prestigious companies who know how to make giant leaps in exploration and mobility."

The Apollo lunar rovers were purposely built for just a few days of use on excursions within five miles of their landing sites. Future missions will need to traverse rugged terrain over much longer distances while operating in greater temperature extremes. New tire capabilities will need to be developed for years of durability and even survive the night that sees temperatures of below -250 degrees Fahrenheit and daytime temps of over 250 degrees Fahrenheit.

Lockheed Martin leads this growing team by leveraging its more than 50-year-history of working with NASA on deep space human and robotic spacecraft, such as NASA's Orion exploration-class spaceship for Artemis and numerous Mars planetary spacecraft. The company will also manage the development of the program's commercial business operations and engagement with NASA and global space agencies. Lockheed Martin has also helped NASA explore every planet of our solar system, and continues to develop new technologies for future space missions.

Another teammate, MDA of Canada, recently announced its commercial robotic arm technology will be used on the human-rated lunar mobility vehicles. The arm will provide valuable contributions as support for astronauts as well as enabling greater functionality of the rover on fully autonomous missions.

Together, the teams are applying unique perspectives and shared expertise to new challenges and market approaches that are being considered for the first time. The companies expect to have its first vehicle on the surface of the Moon in time to support NASA's first landed mission that will have the first woman and first person of color walk on the Moon, currently planned for 2025.

**About Lockheed Martin**

Headquartered in Bethesda, Maryland, Lockheed Martin Corporation is a global security and aerospace company that employs approximately 114,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. Please follow @LMNews on Twitter for the latest announcements and news across the corporation, and follow@LMSpace to learn more about the latest technologies, missions and people driving the future of space.

**About The Goodyear Tire & Rubber Company**

Goodyear is one of the world's largest tire companies. It employs about 72,000 people and manufactures its products in 57 facilities in 23 countries around the world. Its two Innovation Centers in Akron, Ohio, and Colmar-Berg, Luxembourg, strive to develop state-of-the-art products and services that set the technology and performance standard for the industry. For more information about Goodyear and its products, go to www.goodyear.com/corporate.

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