



The United States is preparing a permanent base on the Moon to reach Mars. Military interest is growing, but legal questions remain.

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The United States is preparing to move from simply exploring the Moon to building a permanent presence on its surface. In 2026, NASA formalized the **Moon Base** program, designed to integrate habitats, mobility, power, communications, navigation, logistics, and robotic systems into an increasingly permanent infrastructure in the **lunar South Pole** region.

The stated goal is to achieve a **sustained U.S. presence on the Moon by 2030**. But the Moon is only one part of the project: for NASA, it must also become the major laboratory for developing and validating the technologies needed for future human missions to **Mars**.

From Artemis missions to a true Moon Base

The concept stems from the **Artemis Base Camp**, initially envisioned as an outpost at the lunar South Pole. Moon Base expands on this approach by seeking to create an integrated system capable of supporting human and robotic operations for increasingly extended periods.

NASA plans to build the infrastructure gradually, mission by mission. In August 2026, the Agency described Moon Base as a “**resilient outpost**” intended for science, technology development, and future human operations. Commercial partners are working on landers intended to deliver some of the architecture's initial elements as early as 2028.

At least initially, it should not be envisioned as a large, permanently inhabited structure like a terrestrial base. The project is expected to develop through a distributed network of cargo landers, rovers, power systems, communications, navigation, and robotics, with pressurized habitats to be added later.

Some of the infrastructure may continue operating even when astronauts are absent, through autonomous systems and control from Earth. This model has already been studied under Artemis Base Camp, which called for the predeployment and robotic verification of infrastructure before long-duration human missions.

The Moon as a laboratory for reaching Mars

The link to Mars is direct. NASA regards the Moon as a testbed for learning how to keep personnel and infrastructure operational far from Earth before undertaking Mars missions, where a crew could not rely on a rapid return or immediate resupply.

On the lunar surface, it will be possible to test long-duration habitats, power generation and management, advanced robotics, autonomous maintenance, radiation protection, and above all **ISRU - In-Situ Resource Utilization**, meaning the use of resources available directly on site.

This is also why the **lunar South Pole** is particularly important. Water-ice deposits have been identified in the permanently shadowed regions of craters. In the longer term, the ability to extract water would not only support astronauts but also yield **oxygen and hydrogen**, usable for life support and potentially for propellant production.

Leveraging local resources would progressively reduce the amount of material that must be transported from Earth, a crucial capability also for future missions to Mars.

A civilian base, with clear military limits

Moon Base was conceived as a **NASA civilian** program and, at present, the United States has not announced plans to build a military base on the lunar surface.

Article IV of the **1967 Outer Space Treaty** establishes that the Moon and other celestial bodies must be used exclusively for peaceful purposes and explicitly prohibits the construction of **military bases, installations, and fortifications**, as well as the testing of any type of weapon and the conduct of military maneuvers.

The treaty, however, **does not prohibit the presence of military personnel on the Moon** when employed for scientific research or other peaceful purposes, and it permits the use of equipment necessary for such activities.

The distinction is therefore significant: U.S. military personnel could in the future operate on the Moon in compliance with the treaty for scientific, technical, or support activities. Using Moon Base, or part of its infrastructure, for expressly military purposes would be different, falling within the scope of prohibitions established by the international agreement.

DARPA studies lunar infrastructure

However, the defense sector's interest in the future lunar ecosystem is already tangible.

DARPA, the U.S. Defense Advanced Research Projects Agency, conducted the **LunA-10 - 10-Year Lunar Architecture** study, focused on developing an integrated architecture of shared, scalable infrastructure to support a future lunar economy.

The study covers energy generation and distribution, communications, navigation, mobility, logistics, robotic construction, and commercial use of resources. Companies participating in the program included SpaceX, Blue Origin, Northrop Grumman, Firefly Aerospace, Redwire, Sierra Space, and Nokia.

DARPA specified that LunA-10 was developed in compliance with the Outer Space Treaty and that any use of civilian or military personnel must be intended exclusively for peaceful purposes.

The Space Force looks to the space between Earth and the Moon

It is primarily in **cislunar space**, between Earth and the Moon, that the security dimension takes on greater importance.

The U.S. Space Force is developing **Space Domain Awareness** capabilities designed to detect, identify, and track satellites, vehicles, and other objects far beyond geostationary orbit.

Its doctrine highlights how increased activity beyond GEO and the presence of friendly, neutral, and potentially adversarial actors will make it increasingly important to maintain precise awareness of what is happening in cislunar space.

In 2026, this capability has already found operational applications. During **Artemis II**, Space Force Mission Delta 2 provided tracking and flight safety support along the cislunar corridor.

In parallel, **Oracle-M** is moving forward, an experimental satellite developed by Space Systems Command and Air Force Research Laboratory to detect and track objects beyond geosynchronous orbit. The program is also tied to future national security requirements in cislunar space.

A civilian ecosystem with strategic value

The Defense Department's presence does not mean Moon Base is intended to become a military base. Rather, a **dual-use ecosystem** could develop around the future U.S. presence, in which civilian and commercial infrastructure coexists with capabilities linked to national security.

Energy, communications, navigation, transportation, logistics and space surveillance are essential to support a scientific settlement, but they can also carry strategic significance.

The value of the lunar South Pole also stems from this. The availability of ice, access to energy, landing sites, communications with Earth and the ability to exploit local resources will be decisive factors in developing the first permanent infrastructure.

Whoever succeeds in building a reliable network for energy, transportation, communications, navigation and resource utilization will gain technological expertise, industrial capacity and a significant operational presence in the lunar environment.

China is also targeting the South Pole

The United States will not be the only actor present. China is pursuing the **International Lunar Research Station (ILRS)** project together with its partners, while Washington has built a broad international network around Artemis through the **Artemis Accords**.

Competition does not necessarily imply the future militarization of the surface, but it demonstrates how the Moon is simultaneously acquiring a **scientific, economic and strategic** dimension.

The Moon first, then Mars

The U.S. strategy is therefore unfolding on several levels: establishing a sustained return to the Moon, building infrastructure and industrial capabilities, learning to use extraterrestrial resources, and preparing the technologies and procedures needed to reach Mars.

Moon Base will formally remain a civilian program, and the Outer Space Treaty imposes clear limits on the militarization of the lunar surface. At the same time, DARPA and the U.S. Space Force are already looking at infrastructure and security in cislunar space.

In the 2030s, the Moon could thus become not only humanity's main outpost for exploration beyond Earth, but also a new domain of growing **international strategic interest**.