SCIENCE > SPACE

Artemis Accords: What to Know About NASA's 51-Nation Strong Space Agreement

Neither Russia nor communist China have signed the accords. The United States is the only signatory with human spaceflight capabilities.

A full Moon is seen behind the Artemis I Space Launch System and Orion spacecraft, atop the mobile launcher at Launch Complex 39B at NASA's Kennedy Space Center in Florida on June 14, 2022. Cory Huston/NASA via AP

By T.J. Muscaro
12/20/2024 Updated: 12/20/2024

Print

The Artemis Accords got its 51st signatory this week, with Thailand joining the international agreement on Dec. 16.

Created in 2020, the accords are tied to NASA's Artemis Program and are, according to the administration, intended to "establish a political understanding regarding mutually beneficial practices for the future exploration and use of outer space, with a focus on activities conducted in support of the Artemis Program."

As NASA and its partners get another year closer to sending their astronauts to the Moon, here are some things to know about this growing international agreement.

Out of the 51 nations to sign the accords, the United States is the only one with the operating capability to send human beings beyond the atmosphere.

The European Space Agency (ESA) has opted out of building its own manned vehicles in favor of buying seats on American or Russian vehicles, and the Indian Space Research Organisation (IRSO) plans to launch its first manned mission into orbit, called the Gaganyaan Project, by 2025.

As for spaceports, Japan, South Korea, Israel, and New Zealand have at least one in operation. The ESA's launch complex is in French Guyana.

Several space agencies have been tasked to collaborate on the hardware for the Artemis missions.

The ESA, for example, is building the service module for the Orion space capsule that will carry Artemis astronauts to the Moon, the Japanese Aerospace Exploration Agency (JAXA) is designing the new lunar rover, and further plans to build the Gateway space station in Lunar orbit involve the ESA and the United Arab Emirates.

However, all Artemis astronauts will use mostly American equipment.

They will be launched on rockets made by Boeing, they will make the translunar crossing in a human-rated capsule made by Lockheed Martin, and they will land on the lunar surface in either a SpaceX or BlueOrigin lander.

Manned orbital travel among the signatories will be handled by American spacecraft like the SpaceX Crew Dragon capsules.

Only 15 of the 51 signatory nations have sent an astronaut to the International Space Station, according to NASA, and the list of signatory nations includes those with very little to no experience in spaceflight, such as Armenia, Angola, and the Dominican Republic.

The Artemis Accords affirmed the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, also known as the Outer Space Treaty of 1967.

That treaty, going into effect on Oct. 10 of that year after being ratified by the U.S. Senate that April, prohibited the placement of nuclear weapons, military bases, and any weapons testing or military operations on the Moon.

However, it also prohibited individual nations from establishing colonies on the lunar surface.

The Moon is For All

Article II of the Outer Space Treaty states: “Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.”

It followed Article I, which declared that the Moon and outer space would remain free for all states to use without discrimination of any kind, and all exploration should be “the province of all mankind,”

undertaken for the benefit of all countries regardless of their economic or scientific development.

The accords are rooted in several other treaties and agreements as well to establish best practices for mutual cooperation in space.

These include the “Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space,” and the ”Convention on International Liability for Damage Caused by Space Objects.”

They also include an intent to preserve outer space heritage, such as historic landing sites.

While the Outer Space Treaty went into force in the Soviet Union on the same day as the United States and the Chinese Communist Party (CCP) adopted it on Dec. 30, 1983, neither have yet signed on to the Artemis Accords.

The United States has maintained productive outer-space relations with Russia since the fall of the Soviet Union, partnering on the construction and operation of the International Space Station for more than 20 years.

Meanwhile, the CCP has announced its intention to land on the Moon by 2030 and establish its own international base of operations. However, it is unclear if the CCP will target the United States’ landing site: the lunar south pole.

NASA Administrator Bill Nelson reiterated at a Dec. 5 press conference that the Artemis Program needed to beat the CCP to the Moon, doubting that they would honor the Outer Space Treaty and keep their landing sites open to all.

“I wish that China could be someone that we could cooperate with, and maybe there will be an opportunity in the future,” he said.

“I hope so. But given the fact of the history of how the Chinese government has operated up until, including recently, I don’t want that to occur on a very important part of the Moon.”

Artemis Accords Are Voluntary

While the Artemis Accords indicated a nation’s intent to commit to follow a certain set of principles with regard to operating in outer space, they are not binding.

In outlining its method of operation, the Artemis Accords group stated: “Signing the Artemis Accords does not imply or initiate specific, cooperative space activities with or among other signatories, nor does doing so preclude any country from engaging in cooperative space activities with any other country, signatory or not.”

Giving nations the option to cooperate with any non-signatory country suggests that they could work with the CCP, seen by many as the United States’ primary global adversary, in space efforts without consequence.

Artemis II, humanity’s first manned flight around the Moon since 1972, is scheduled to launch in April 2026.

Artemis III, the first mission of the program to land on the Moon, is targeted for mid-2027.

T.J. Muscaro
Author

Based out of Tampa, Florida, TJ primarily covers weather and national politics.

Author's Selected Articles

Florida Files Charges Against Alleged Would-Be Assassin Ryan Routh

Dec 18, 2024

Where Americans Could See a White Christmas This Year

Dec 17, 2024

Florida's Patronis Vows to Advance Trump's Agenda If Elected to Gaetz's Former House Seat

Dec 13, 2024

NASA Delays Artemis Moon Missions Until 2026 and 2027

Dec 06, 2024