

NASA Charts More Reliable Course for America's Return to Lunar Surface

NASA is refining the Artemis program to put the United States on a clear, achievable path to returning astronauts to the Moon, this time to stay. The updated approach draws on proven Apollo-era principles and focuses on building an affordable, repeatable architecture capable of supporting frequent and safe crewed missions to the lunar surface for decades into the future.

Announced in February, the [new plan](#) adds a dedicated Artemis III test mission, standardizes the SLS upper stage and mobile launcher configuration, and signals demand to industry that NASA is preparing for semi-annual crewed lunar missions after Artemis V.

Together, these changes create a more credible and repeatable plan that keeps NASA on track to meet National Space Policy goals: landing NASA astronauts on the Moon in 2028 and establishing an enduring presence.

Challenging Starting Point

For nearly 20 years, NASA and its partners have invested more than \$100 billion in a crew-rated lunar transportation architecture that has not yet flown astronauts. The current model faces several constraints:

- Launch cadence was trending toward one mission every three years, which is uneconomical, introduces additional risk and requires rebuilding operational muscle memory with each launch
- The mission sequence jumps directly from a lunar flyby to a lunar landing without an intermediate, in-space, test of the integrated operations in between the crew module and lander
- Multiple oversight reports have highlighted cost growth and material risks in execution

NASA leadership recognized the previous plan, as designed, was unlikely to achieve the highest priority objectives and made deliberate adjustments to put the Artemis program on a more effective trajectory.

Old vs. New Artemis Program Structure

Original Plan:

- Artemis I: Uncrewed test flight — 2022
- Artemis II: Crewed lunar flyby — 2026

- Artemis III: First lunar landing — 2028
- Artemis IV: Gateway visit & lunar landing — TBD
- Artemis V: Gateway visit & lunar landing — TBD

Updated Plan —announced Feb 2026

- Artemis I: Uncrewed test flight — 2022
- Artemis II: Crewed lunar flyby — 2026
- Artemis III: Human landing system & EVA suit test mission in Earth orbit — 2027
- Artemis IV: Astronauts return to the lunar surface — early 2028
- Artemis V: Additional astronaut landing — targeting late 2028

The key point: the astronaut lunar landing date remains 2028.

The revised sequence enables a more rapid cadence to retain “muscle memory” developed during launch and flight operations and ensures critical landing systems are tested with crew before attempting operations on the lunar surface — dramatically reducing mission risk.

More Reliable, Repeatable Architecture

The updated lunar exploration strategy focuses on achievability, affordability and safety:

- Vehicle standardization to enable serial production and faster launch pad turnaround
- NASA technical expertise embedded directly onsite within vendor production lines to ensure quality and drive performance
- A risk-reduction mission in 2027 (Artemis III) to evaluate crew-lander interfaces in Earth orbit — an Apollo 9-style “test before you land” step
- A human return to the lunar surface in 2028, now targeted for Artemis IV, still in 2028
- Pursuing dual, lower-cost landing pathways and seeking industry-proposed architectures capable of evolving to enable more frequent and economical mission, beginning with Artemis VI

More Credible Path to Moon Base

Under the updated plan, construction of a permanent lunar base effectively begins this year and in early 2027 with the first robotic landings. This creates a more realistic path for NASA astronauts to work directly alongside the initial Moon Base construction.