

Lander 'alive and well' after company scores first US moon landing since Apollo era

February 23 2024, by Marcia Dunn



This photo provided by Intuitive Machines shows the company's IM-1 Nova-C lunar lander in Houston in October 2023. Intuitive Machines reported Friday, Feb. 23, 2024, that it's communicating with its lander, Odysseus, and sending commands to acquire science data. But it noted: "We continue to learn more about the vehicle's specific information" regarding location, overall health and positioning. Credit: Intuitive Machines via AP, File



The moon's newest arrival was said to be "alive and well" a day after making the first U.S. landing in half a century, but flight controllers were still trying to get a better handle on its bearings.

Intuitive Machines reported Friday that it's communicating with its lander, Odysseus, and sending commands to acquire science data. But it noted: "We continue to learn more about the vehicle's specific information" regarding location, overall health and positioning.

The Houston company was shooting for the <u>south polar region</u>, near the Malapert A crater, closer to the pole than anyone else so NASA could scout out the area before astronauts show up later this decade.

With Thursday's touchdown, Intuitive Machines became the first private business to pull off a moon landing, a feat previously achieved by only five countries. The mission was sponsored in large part by NASA, whose experiments were on board. NASA paid \$118 million for the delivery under a program meant to jump-start the lunar economy.

One of the NASA experiments was pressed into service when the lander's navigation system failed in the final few hours before touchdown. The lander took an extra lap around the moon to allow time for the last-minute switch to NASA's laser system.





This image provided by Intuitive Machines shows its Odysseus lunar lander over the near side of the moon following lunar orbit insertion, Wednesday, Feb. 21, 2024. Intuitive Machines reported Friday, Feb. 23, 2024, that it's communicating with its lander, Odysseus, and sending commands to acquire science data. But it noted: "We continue to learn more about the vehicle's specific information" regarding location, overall health and positioning. Credit: Intuitive Machines via AP, File





A SpaceX Falcon 9 rocket, carrying Intuitive Machines' lunar lander, lifts off from pad 39A at Kennedy Space Center in Cape Canaveral, Fla., early Thursday, Feb. 15, 2024. Intuitive Machines reported Friday, Feb. 23, 2024, that it's communicating with its lander, Odysseus, and sending commands to acquire science data. But it noted: "We continue to learn more about the vehicle's specific information" regarding location, overall health and positioning. Credit: AP Photo/John Raoux, File

"Odie is a scrapper," mission director Tim Crain said late Thursday via X, formerly Twitter.

Another experiment didn't go so well. Embry-Riddle Aeronautical University's EagleCam—a set of six cameras—was supposed to eject 30 seconds before touchdown so it could capture pictures from afar of



Odysseus' touchdown. EagleCam landed, instead, still attached to the lander.

The original plan had to be modified during the last orbit due to "unexpected events," a university spokeswoman explained.

Intuitive Machines was the second company to aim for the moon under NASA's commercial lunar services program. Last month, Pittsburgh's Astrobotic Technology gave it a shot, but a fuel leak on the lander cut the mission short and the craft ended up crashing back to Earth.

Until Thursday, the U.S. had not landed on the moon since Apollo 17's Gene Cernan and Harrison Schmitt closed out NASA's famed moonlanding program in December 1972. NASA's new effort to return astronauts to the moon is named Artemis after Apollo's mythological twin sister. The <u>first Artemis crew landing</u> is planned for 2026 at the earliest.

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