

## SpaceX launches billionaire to conduct the first private spacewalk

September 10 2024, by Marcia Dunn



A SpaceX Falcon 9 rocket with a crew of four lifts off from pad 39A at the Kennedy Space Center in Cape Canaveral, Fla., Tuesday, Sept. 10, 2024. Credit: AP Photo/John Raoux

A daredevil billionaire rocketed back into orbit Tuesday, aiming to



perform the first private spacewalk and venture farther than anyone since NASA's Apollo moonshots.

Unlike his previous chartered flight, tech entrepreneur Jared Isaacman shared the cost with SpaceX this time around, which included developing and testing brand new spacesuits to see how they'll hold up in the harsh vacuum.

If all goes as planned, it will be the first time private citizens conduct a spacewalk, but they won't venture away from the capsule. Considered one of the riskiest parts of spaceflight, spacewalks have been the sole realm of professional astronauts since the former Soviet Union popped open the hatch in 1965, closely followed by the U.S. Today, they are routinely done at the International Space Station.

Isaacman, along with a pair of SpaceX engineers and a former Air Force Thunderbirds pilot, launched before dawn aboard a SpaceX Falcon 9 rocket from Florida. The spacewalk is scheduled for Thursday, midway through the five-day flight.

But first the passengers are shooting for way beyond the International Space Station—an altitude of 870 miles (1,400 kilometers), which would surpass the Earth-lapping record set during NASA's Project Gemini in 1966. Only the 24 Apollo astronauts who flew to the moon have ventured farther.





This image made from a SpaceX video shows the launch of the Polaris Dawn mission on a Falcon 9 rocket from the Kennedy Space Center in Florida, Tuesday Sept. 10, 2024. Credit: SpaceX via AP

The plan is to spend 10 hours at that height—filled with extreme radiation and riddled with debris—before reducing the oval-shaped orbit by half. Even at this lower 435 miles (700 kilometers), the orbit would eclipse the space station and even the Hubble Space Telescope, the highest shuttle astronauts flew.

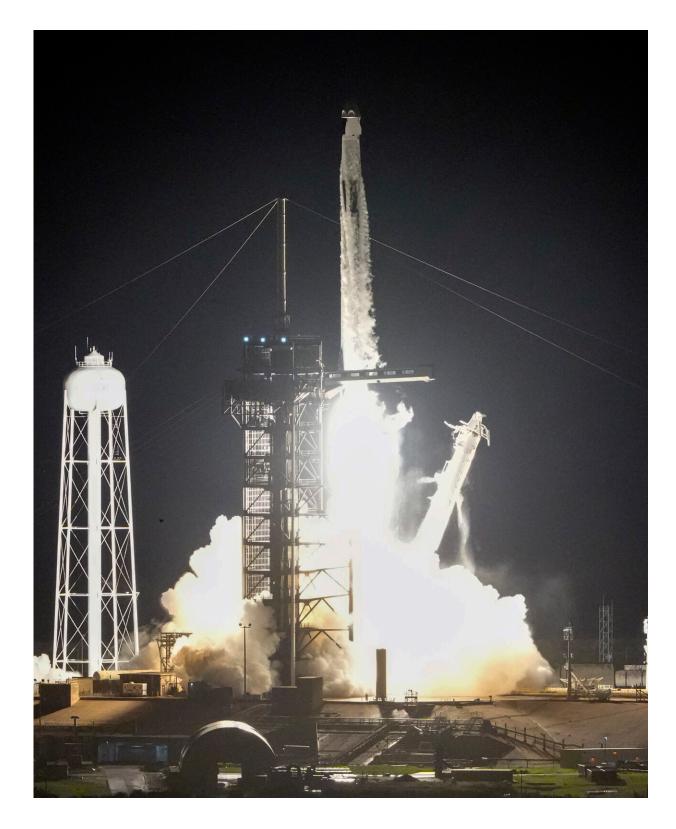
All four wore SpaceX's spacewalking suits because the entire Dragon capsule will be depressurized for the two-hour spacewalk, exposing everyone to the dangerous environment.

Isaacman and SpaceX's Sarah Gillis will take turns briefly popping out of the hatch. They'll test their white and black-trimmed custom suits by



twisting their bodies. Both will always have a hand or foot touching the capsule or attached support structure that resembles the top of a pool ladder. There will be no dangling at the end of their 12-foot (3.6-meter) tethers and no jetpack showboating. Only NASA's suits at the space station come equipped with jetpacks, for emergency use only.







## Photo/John Raoux

Pilot Scott "Kidd" Poteet and SpaceX's Anna Menon will monitor the spacewalk from inside. Like SpaceX's previous astronaut flights, this one will end with a splashdown off the Florida coast.

"We're sending you hugs from the ground," Launch Director Frank Messina radioed after the crew reached orbit. "May you make history and come home safely."

Isaacman replied: "We wouldn't be on this journey without all 14,000 of you back at SpaceX and everyone else cheering us on."

At a preflight news conference, Isaacman—CEO and founder of the credit card processing company Shift4—refused to say how much he invested in the flight. "Not a chance," he said.

SpaceX teamed up with Isaacman to pay for spacesuit development and associated costs, said William Gerstenmaier, a SpaceX vice president who once headed space mission operations for NASA.





A time exposure shows photographers as they document the SpaceX Falcon 9 rocket with a crew of four as it launches from pad 39A at the Kennedy Space Center in Cape Canaveral, Fla., Monday, Sept. 9, 2024. Credit: AP Photo/John Raoux

"We're really starting to push the frontiers with the private sector," Gerstenmaier said.

It's the first of three trips that Isaacman bought from Elon Musk 2 1/2 years ago, soon after returning from his first private SpaceX spaceflight in 2021. Isaacman bankrolled that tourist ride for an undisclosed sum, taking along contest winners and a childhood cancer survivor. The trip raised hundreds of millions for St. Jude Children's Research Hospital.



Spacesuit development took longer than anticipated, delaying this first socalled Polaris Dawn flight until now. Training was extensive; Poteet said it rivaled anything he experienced during his Air Force flying career.

As SpaceX astronaut trainers, Gillis and Menon helped Isaacman and his previous team—as well as NASA's professional crews—prepare for their rides.











Astronauts, from left, mission specialist Anna Menon, pilot Scott Poteet, commander Jared Isaacman and mission specialist Sarah Gillis arrive at the Kennedy Space Center for an upcoming private human spaceflight mission in Cape Canaveral, Fla., Monday, Aug. 19, 2024. Credit: AP Photo/John Raoux









Astronauts, from left, mission specialist Anna Menon, pilot Scott Poteet, commander Jared Isaacman and mission specialist Sarah Gillis arrive at the Kennedy Space Center for an upcoming private human spaceflight mission in Cape Canaveral, Fla., Monday, Aug. 19, 2024. Credit: AP Photo/John Raoux



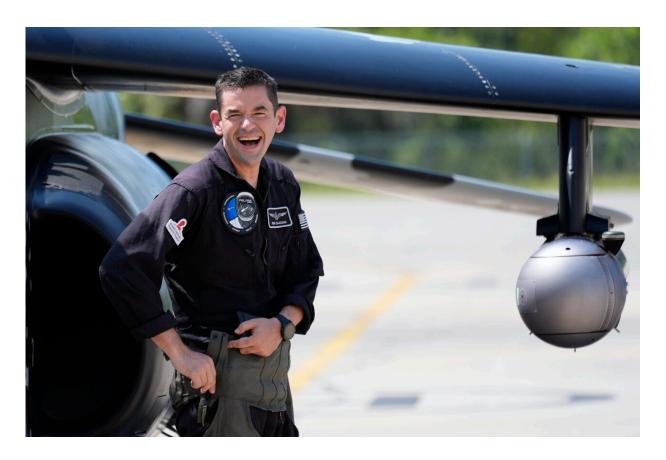


Astronauts from left, mission specialist Anna Menon, pilot Scott Poteet, commander Jared Isaacman and mission specialist Sarah Gillis arrive at the Kennedy Space Center for an upcoming private human spaceflight mission at Cape Canaveral, Fla., Monday, Aug. 19, 2024. Credit: AP Photo/John Raoux









Jared Isaacman arrives at the Kennedy Space Center in Cape Canaveral, Fla., Monday, Aug. 19, 2024, to prepare for an upcoming SpaceX private human spaceflight mission. Credit: AP Photo/John Raoux

"I wasn't alive when humans walked on the moon. I'd certainly like my kids to see humans walking on the moon and Mars, and venturing out and exploring our solar system," the 41-year-old Isaacman said before liftoff.

Poor weather caused a two-week delay. The crew needed favorable forecasts not only for launch, but for splashdown days later. With limited supplies and no ability to reach the space station, they had no choice but to wait for conditions to improve.



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