

SpaceX a week away from first private spacewalk

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The SpaceX Polaris Dawn crew (L to R:) Jared Isaacman, Anna Menon, Sarah Gillis and Scott Poteet.

Four members of a SpaceX mission that will carry out the first ever private spacewalk arrived in Florida on Monday ahead of their takeoff

next week.

The five-day expedition, named Polaris Dawn, will be led by US billionaire Jared Isaacman, who already chartered the first all-civilian orbital spaceflight in 2021, called Inspiration4.

"It's been two and a half years since we announced the Polaris program. It's been a really exciting journey of development and training," Isaacman told a press conference Monday.

He did not reveal how much he has spent on the program, which includes a total of three missions and which he jointly funds with SpaceX.

For the trip, the company has developed its first generation of space suits, which are white and futuristic.

"This will be epic," SpaceX CEO Elon Musk wrote on X, which he also owns.

The launch of the Falcon 9 rocket is scheduled to take place before dawn next Monday from the Kennedy Space Center in Florida.

Two SpaceX employees will be on the trip: The first, Sarah Gillis, is in charge of astronaut training and trained Isaacman for Inspiration4.

The second, Anna Menon, worked for NASA before joining SpaceX.

"I've spent years trying to put myself in the seat of astronauts in space, and I am really looking forward to learning firsthand what that experience is actually like," she said.

The fourth passenger is pilot Scott Poteet, a close friend of Isaacman.

'Challenging training'

The quartet has undergone [intensive training](#): some 2,000 hours in a simulator, centrifuge sessions, [scuba diving](#), skydiving and climbing the Cotopaxi volcano in Ecuador.

"I can tell you without a doubt, this has been some of the most challenging training that I've ever experienced," said Poteet, who flew [fighter jets](#) for 20 years in the US Air Force.

The [mission](#) has three main objectives, in addition to the 40 or so experiments that will be conducted on board.

The first is to reach an altitude of 1,400 kilometers (870 miles), the furthest distance for a space crew since the Apollo lunar missions.

Since those missions included only men, Gillis and Menon will become the two women to have traveled the farthest from Earth.

By comparison, the International Space Station is located at an altitude of about 400 kilometers. The distance between the Earth and Moon is 380,000 kilometers.

A second objective for the mission is to conduct a laser communication test between the ship and SpaceX's Starlink satellites.

But above all, once in a lower orbit, the astronauts will carry out the first commercial spacewalk, to be broadcast live on the mission's third day.

Since the Dragon capsule has no airlock, the whole spacecraft will be exposed to the vacuum of space when the hatch is opened.

Two passengers will remain on board while the two others venture

outside, with each pair having a turn spacewalking.

They will perform movements to test their new space suits, including what Isaacman called a "hands-free demonstration," all while still being linked to the capsule.

So much to 'explore'

The [space suits](#) are based on those already used by SpaceX, but have been developed to withstand extreme temperatures and are equipped with cameras.

"Someday, someone could be wearing a version" of the suit as they are "walking on Mars," Isaacman said, adding that it "feels like a huge honor to have that opportunity to test it out on this flight."

A second similar Polaris mission is planned after this trip, and then a planned third trip will be the first crewed flight on SpaceX's massive Starship rocket, currently under development and ultimately intended for trips to the Moon and Mars.

Isaacman praised the private sector's role in helping "unlock this last frontier."

"I'd certainly like my kids to see humans walking on the Moon and Mars and venturing out and exploring our solar system," he said.

"We haven't even scratched the surface yet," he said, adding: "There's so much to go out and explore and discover along the way."

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