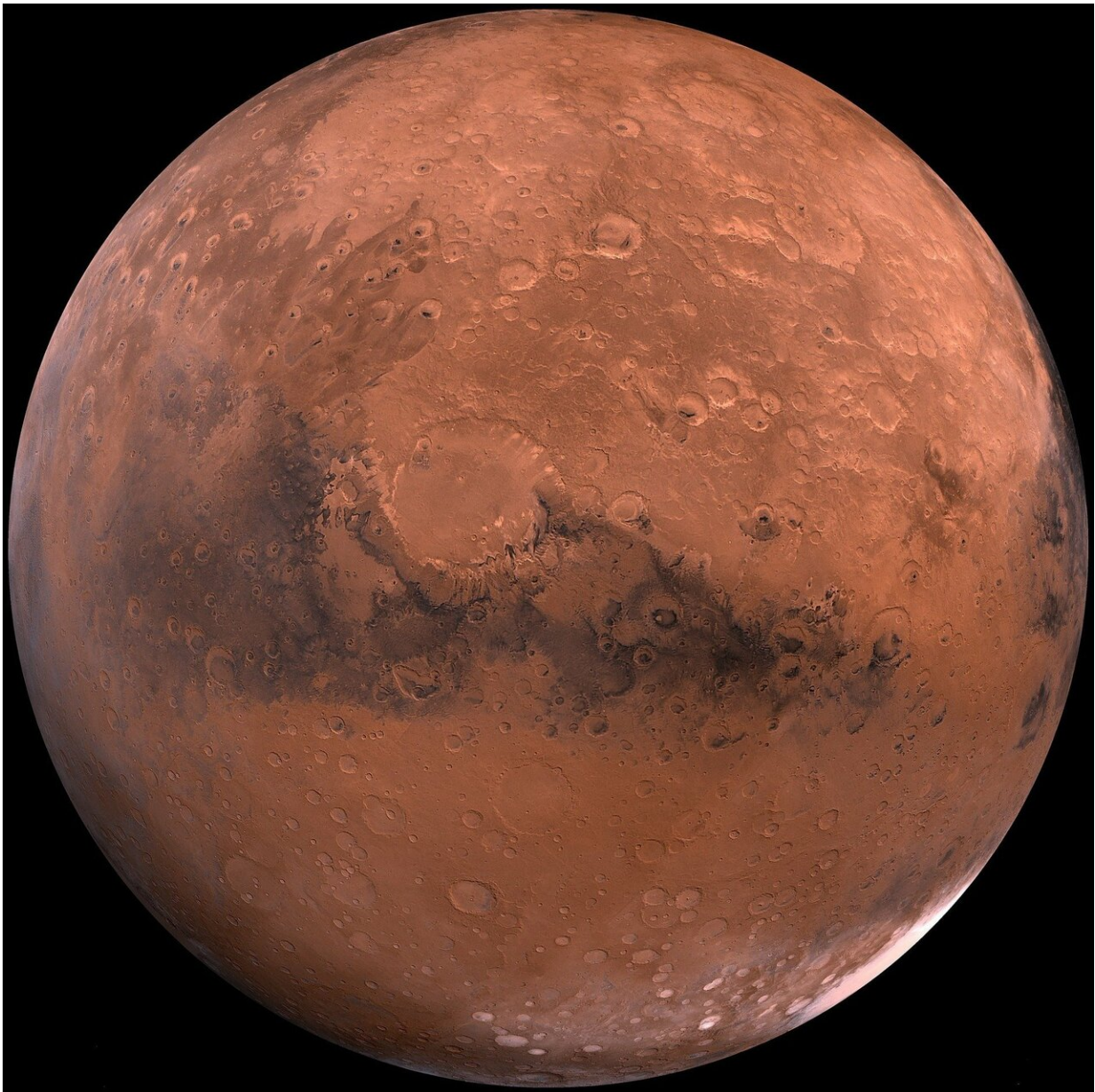


Mars-bound payload on way to Florida for 1st launch of Blue Origin New Glenn

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The Mars-bound twin spacecraft for NASA's ESCAPE mission were packed up in California to be shipped out to Florida this week ahead of what would be the first ever launch of Blue Origin's New Glenn rocket from Cape Canaveral.

ESCAPE stands for Escape and Plasma Acceleration and Dynamics Explorers, and the mission's purpose is to orbit Mars and observe plasma and magnetic fields around the planet to help understand what processes strip atoms from Mars' magnetosphere and upper atmosphere. That could help explain why Mars' atmosphere is so thin, and how it may have evolved over time.

The two [small satellites](#), dubbed Blue and Gold, were built by Rocket Lab in California for NASA and the University of California Berkeley's Space Science Laboratory.

They will soon arrive at Kennedy Space Center where they will head to a cleanroom for post-transport inspections and tests. Eventually, they will be encapsulated for launch on New Glenn from Blue Origin's pad at Cape Canaveral Space Force Station's Launch Complex 36, something Blue Origin officials state will happen before the end of the year.

Rocket Lab is most known for its small launch vehicle activity, second to only SpaceX in recent years for number of launches, mostly from New Zealand from whence its founder and CEO Peter Beck hails. Rocket Lab notably successfully launched the CAPSTONE mission for NASA to prove [future spacecraft](#) such as Artemis mission Orion capsules could enter a unique type of orbit around the moon.

"We've already been to the moon for NASA, so we're excited to build on that and send Rocket Lab technology deeper into the solar system, this time to the Red Planet," said Beck in a press release. "Our Space Systems team has built a beautiful and highly capable pair of spacecraft to help NASA and the University of California Berkeley further humanity's understanding of Mars."

It won the design subcontract for the two satellites, using the company's Photon spacecraft, in 2021 as part of NASA's Small Innovative Missions for Planetary Exploration (SIMPLEx) program with NASA's Science Mission Directorate. The pair have an 11-month trip to Mars after launch and will enter elliptical orbits for the one-year planetary science mission.

Rocket Lab performed assembly, integration and testing at its Spacecraft Production Complex and headquarters in Long Beach, California.

Rob Lillis, ESCAPADE's principal investigator and Associate Director for Planetary Science at the UC Berkeley Space Sciences Laboratory praised the efforts by Rocket Lab over the last three years to keep the mission on target for its launch window opportunity.

"The successful delivery of the spacecraft to Kennedy Space Center marks a significant milestone and the culmination of over three years of dedicated teamwork from individuals across the project, especially our partners at Rocket Lab," he said. "Interplanetary spacecraft must be much more resilient than earth satellites, and developing not one, but two of these probes almost from scratch was no small feat."

To get to Mars, though, it needs Jeff Bezos' new heavy lift [rocket](#) to work on its first try after NASA awarded Blue Origin the launch task order worth \$20 million. Its launch window begins in September and runs into October. The ESCAPADE website has Sept. 29 as a

placeholder launch date.

NASA is also relying on Blue Origin and New Glenn for one of the Artemis program's two lunar human landing systems, Blue Moon.

And Blue Origin has a heavy manifest for commercial customers, including several flights for Bezos' Amazon and its Project Kuiper satellites.

Construction on the rockets continues at the Blue Origin factory next door to Kennedy Space Center Visitor's Complex on Merritt Island and teams recently tested out recovery operations at Port Canaveral for when its first-stage boosters return after launch.

The company has large enough facilities at Cape Canaveral to process three New Glenn rockets at once. Blue Origin took over the lease for LC-36 in 2015, investing about \$1 billion in the pad site alone. It was previously used for government launches from 1962–2005, including lunar lander Surveyor 1 in 1967 and some of the Mariner probes.

When launches finally do occur, the first-stage booster will land about 620 miles downrange in the Atlantic on a landing platform similar to SpaceX launch and landings of its Falcon 9 rockets. After landing, they will make their way back to Port Canaveral for unloading and reuse with the boosters designed to fly up to 25 times.

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