

Blue Origin's new crane at Port Canaveral: Another piece to future launch puzzle

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Blue Origin has staked out its space at Port Canaveral, right next to SpaceX, with a tower crane for eventual rocket booster recovery operations. Now the company just needs to launch one to put it to work.

The [crane](#) arrived at the port as cargo from Germany in October adding another puzzle piece to Jeff Bezos' plans to send up its heavy-lift New Glenn rocket from Cape Canaveral Space Force Station's Launch Complex 36.

"It's now the highest point in our Port Canaveral as a whole," said Port Canaveral CEO Capt. John Murray at a port authority meeting last month. "It's a very, very tall crane and when you look across and you see our mobile harbor crane, it looks very small compared to this Blue Origin crane."

At 375 feet tall, it towers over the [port's](#) 302-foot-tall crane, both of which are installed at North Cargo Berth 6.

"That's our crane and a [significant milestone](#) as we make rapid progress in New Glenn's development," according to an emailed statement from Blue Origin. "The crane will be used to offload New Glenn's fully reusable first stage from our sea-based landing platform back onto shore in Port Canaveral."

Those first-stage boosters will be 189 feet tall compared to the SpaceX boosters at about 135 feet.

The entirety of the New Glenn rocket will rise to 322 feet when it launches using seven of Blue Origin's BE-4 engines to give it nearly 3.9 million pounds of thrust at liftoff.

While the company confirmed this month that it is still targeting 2024 for New Glenn's first launch, that could slip into 2025 as Blue Origin has an engine supply problem to solve.

New Glenn needs seven working BE-4 engines, but it has to supply two engines for each of its customer United Launch Alliance's new Vulcan

Centaur rocket launches.

"We've delivered the first two flight engines and look forward to Vulcan's first flight later this year," Blue Origin's statement reads.

The first ULA mission dubbed Certification-1 with a payload to send Astrobotic's Peregrine [lunar lander](#) to the moon is targeting a Dec. 24 liftoff, but it has a second certification flight in the first half of 2024 that would then allow it to fly several Department of Defense missions in 2024.

Vulcan launches are also going to be relied on for dozens of launches it needs to complete before summer 2026 for Bezos' company Amazon to launch thousands of its Project Kuiper satellites, in itself a competitor to SpaceX's Starlink internet service.

It's unclear the pace at which Blue Origin can provide the required engines for ULA's heavy spate of Vulcan flights, although at least one of the two engines for ULA's second flight were in final assembly at Blue Origin's Alabama facilities as of August. And while ULA only needs two per launch, Blue Origin has to satisfy its customer in addition to knocking out seven for its first flight.

When it does finally fly, and if it can stick the landing, the rocket is designed for at least 25 reflights, "aligned to our mission of radically reducing launch costs and increasing access to space," Blue Origin stated.

It also will send up Project Kuiper satellites for Amazon and to support a human landing system featuring Blue Origin's Blue Moon to support future Artemis missions for NASA.

Construction on the rockets continues at the Blue Origin factory next

door to Kennedy Space Center Visitor's Complex on Merritt Island.

NASA Administrator recently toured the massive Space Coast facility as well as Blue Origin's [engine](#) production operation in Huntsville, Alabama, to check up on progress toward Artemis V currently on NASA's roadmap for 2029.

"Impressive visit to the [Blue Origin] Huntsville Engine Production Facility," Nelson wrote on X in October. "NASA is proud to partner with Blue Origin, especially on the Blue Moon human landing system, which will help ensure a steady cadence of astronauts on the Moon to live and work before we venture to Mars."

At the same time, preparation continues at the reconfigured Launch Complex 36 on the southern end of Cape Canaveral. The company has large enough facilities on site 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, after which it will make its way back to Port Canaveral where Blue Origin's new crane will be waiting to start the launch process all over again.

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