

Bezos's rocket company is rebuilding just as its bigger rival reaps \$75bn from a stratospheric IPO. Slow progress is its operating procedure, as the group positions itself as the tortoise to Musk's hare.

By Rafe Rosner-Uddin

# Can Blue Origin escape SpaceX's shadow?

**O**n the morning of May 29, Blue Origin staff arrived at its launch pad in Florida to a scene of utter annihilation. The night before, one of the company's 98-metre-tall New Glenn rockets had exploded in a colossal fireball likened by observers to the detonation of a nuclear bomb. Crumpled engines and vehicle parts were scattered alongside a damaged hangar. The transporter erector, used to raise rockets into a vertical stance ahead of launch, was toppled and a lightning tower completely obliterated.

Nobody was harmed in the violent blast, but multiple staff members say they felt numbed by the incident and overwhelmed by the challenge that lay ahead. "All our hard work went up in flames," a Blue Origin employee tells the FT. "So much effort was put into getting this rocket ready to fly and we lost it in seconds."

Blue Origin declined to comment for this story.

The investigation into the incident is continuing, but staff say a suspected leak triggered an explosion as the rocket was undergoing a procedural "static fire" to test its engines ahead of a high-profile mission to ferry 48 satellites into space for Amazon.

Such a catastrophe would be a serious blow to any rocket maker, but it comes at an especially sensitive time for Blue Origin, the space company founded and wholly owned by Amazon's Jeff Bezos.

Blue Origin has long trailed in the space race behind Elon Musk's SpaceX, which completed a blockbuster IPO last week having cemented its dominant position in the market with 170 missions last year.

Slow progress is standard operating procedure for Bezos's company: its motto *Gradatim Feroctiter* — "step by step, ferociously" — positions it as the tortoise to Musk's hare. But privately, people close to the company say the rivalry is deeply felt. "It burns Jeff up that we're so far behind SpaceX," says one senior employee.

In the past few months, Blue Origin looked ready to start closing the gap. The team appeared on the cusp of launching its heavy-lift rocket at a competitive rate with plans for 12 launches this year, having undergone a radical transformation under the leadership of former Amazon executive Dave Limp, according to more than a dozen current and former employees.

A week before the disaster, Bezos invited CNBC to the company's factory, where he confirmed Blue Origin was ready to take on outside investors for the first time. "We finally have enough visibility into our future and financial success," he said.

Not even Bezos could have foreseen May 28. Now the company is being forced to rebuild at a time when its nearest rival has unlocked vast capital on the public markets that will propel it even further forward. Blue Origin's hopes of challenging the dominance of SpaceX and the shape of the space industry rest on a bullish bet to return its New Glenn rocket to flight this year.

May's blast has served as a costly reminder of the risks of a more aggressive approach, but it is being set against the vast opportunity that comes with driving an era of new infrastructure and off-planet exploration and discovery.

"They have a powerful and capable rocket," says Greg Autry, former White House liaison to NASA. But "SpaceX has an amazing operational cadence and it remains to be seen whether Blue can do that... I think they can."

Amazon was little more than an online bookshop when Bezos founded Blue Origin in 2000. Initially the space company operated like a think-tank, undertaking research into space flight and the feasibility of rocket reuse. It was kept afloat by its founder — then and now Blue Origin's sole shareholder — who sold Amazon stock to fund it.

The company's mission shifted to commercial space flight in the late 2000s under the leadership of former NASA engineer Rob Meyerson. It started to develop New Shepard, an 18-metre rocket that would ferry tourists into sub-orbit.



A Blue Origin New Glenn rocket launches successfully in Florida in April. Below: damage at Blue Origin's launch pad following the New Glenn explosion in late May

Mauricio Paz via Reuters/Corbis Outlines



Blue Origin achieved significant feats with the rocket, including being the first company to land a booster used in sub-orbital flight — the portion of the vehicle that helps propel it off the ground — in November 2015.

Yet its achievements were quickly overshadowed by SpaceX. The Musk-led company landed its orbital booster a month after Blue Origin and rapidly developed and refined its Falcon 9 rocket, a 70-metre-tall craft that can ferry nearly 23 tonnes into space on a single mission. The group carried more than 80 per cent of all mass into orbit last year, according to regulatory filings.

"SpaceX has set industry standards," says Caleb Henry, an analyst at Quilty Space. "Blue Origin entered a market that was unattended and is now racing to be in second place."

Multiple current and former employees say that Blue Origin initially struggled to make the adjustment to a fully fledged rocket company. They say that the group had a conservative attitude under Bob Smith, a former Honeywell executive, who took charge in 2017 to scale the organisation.

Smith's tenure led to bureaucracy and cultural problems, including internal allegations that the company had a male-dominated culture, the people add. Blue Origin previously pushed back against these claims.

Some employees acknowledge that the company scaled rapidly during Smith's tenure with headcount rising from 500 to more than 11,000 people as he worked to build the infrastructure necessary to compete for large commercial and government contracts.

The decision to change management came as Bezos — having left Amazon in 2021 — started to play a more prominent role within Blue's leadership, employees say.

"His focus was 100 per cent at Blue Origin," says one former senior employee. "He joined weekly meetings and deep dive reviews... He sat in on technical discussions and was focused on all elements of the company."

Limp meanwhile introduced an "Amazon-like" approach to the company's daily operations, with 12-hour shifts and aggressive targets. He laid off more than 10 per cent of Blue Origin's workforce last year and reshaped management, making several senior hires from the Seattle-based group.

Multiple current and former employ-

ees say some of these changes hastened the launch of New Glenn in January 2025, which reached orbit with the company sacrificing its rocket's booster in a bid to accelerate development.

Blue Origin proceeded to recover its booster on only its second flight in November and repeated the feat once more in April.

The company also recruited senior leaders from SpaceX and has adopted what insiders call an "iterative approach" to development. In April, one of its upgraded BE-4 engines blew up on the test stand, according to two people familiar with the matter. Repairs were completed within weeks and the company gained valuable insights.

"Iteration worked out for SpaceX," says one employee. "Stuff will blow up and you learn from it."

Bezos is also spending more

"There is still a significant margin [for launch providers] because there are only a few operators out there"

aggressively, with Blue Origin scaling operations including building an 800,000 sq ft manufacturing facility and a second launch pad in Florida.

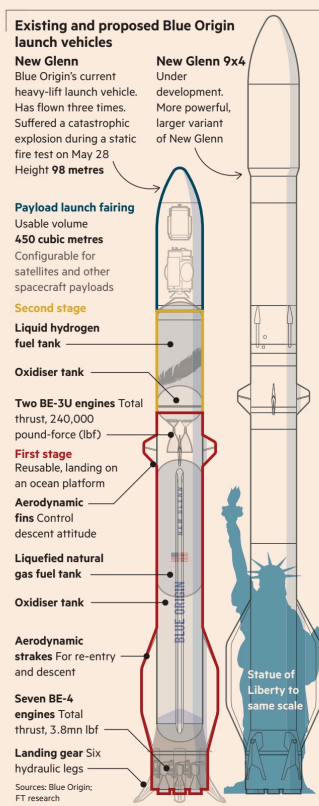
Limp in January placed New Shepard — whose engines are used in the upper stage of New Glenn — on hiatus for two years as the company focuses on its wider commercial objectives.

Blue Origin is also seeking to mimic the success of SpaceX's satellite broadband network Starlink, which generated \$4.4bn in operating income last year alone. It plans to use TeraWave, a proposed network of enterprise-focused satellites it unveiled in January, as a route to becoming cash flow positive.

In a staff meeting last month, Limp told employees that the group was aiming to use half of all New Glenn flights to build out its satellite constellation due to the significant business benefits.

"You don't have to look far for the [business] model. Just look at SpaceX," he said, according to people familiar with the remarks.

Blue Origin has filed with the US Federal Communications Commission for a constellation of 5,408 TeraWave satellites and promised speeds significantly faster than SpaceX's Starlink. It has also



submitted proposals for "Project Sunrise" — its plans to build a 51,000-strong satellite constellation to run AI workloads similar to SpaceX's own orbital data centre ambitions.

"A big reason why SpaceX has been able to invest so much in Starship and support scaling has been Starlink," says Josh Parker, an analyst at Capstone, a Washington-based consulting firm. "A lot of Blue Origin's launches are for [the broadband satellite project] Amazon Leo. That's not necessarily a cash engine for the company."

Yet replicating SpaceX's model going forward is not straightforward. The Musk-led company's IPO raised \$75bn, far exceeding the amount that even Bezos would likely be able to provide for Blue Origin's use without significantly selling down Amazon stock.

SpaceX is also not standing still, pursuing an ever more ambitious vision with Starship, a 124-metre-tall fully reusable rocket that can ferry more than twice New Glenn's payload.

Several employees and industry insiders likened the May 28 incident to the catastrophic explosion SpaceX experienced in 2016 with its Falcon 9 rocket.

That "major anomaly" also occurred during a "static fire" test. While it was a severe setback, SpaceX's recovery has been robust.

In a post on X following May's New Glenn blast, Musk said: "Most unfortunate. Rockets are hard."

Limp said on June 1 that one of its boosters and three upper stages it had made and stored on site "looked good". "We will fly again before the end of this year," he insisted.

Internally the company has spoken about accelerating plans for a redesigned launch pad and bringing forward a series of design changes in a bid to capitalise on this moment in time to make progress on technical updates that had been delayed due to Blue Origin prioritising rockets for launch.

Yet some employees are sceptical that New Glenn will launch again in 2026. "We are still digging through the debris... I'd be surprised if we launch again this year," says one longstanding employee. "The pad reconstruction will take months of work."

Images shared across the FT show the extent of damage at Blue Origin's launch pad, including a destroyed concrete bridge and strewn rocket parts. Dedicated pipelines that feed liquid coolant, fuel and gases used to maintain the rocket's safety have also been damaged.

"There's no certain timing on the delivery of key parts," says another longstanding employee. "Even if you start pulling resources from other parts of the company there are still going to be constraints."

Delays affecting Blue Origin will reverberate across the space industry and play into the hands of SpaceX, which analysts anticipate will be relied on by satellite providers and customers for the heft of upcoming launches. Few rivals, including ULA and Europe's ArianeSpace, are able to offer the same frequency and payload capacity. Customers must otherwise rely on SpaceX to launch, including the US government.

Blue Origin has a \$3.4bn contract with NASA to deliver a lunar lander to support its Artemis mission returning people to the Moon and last month was awarded a \$468mn award for two more uncrewed lunar landers. Other providers, including ULA and smaller outfits such as Rocket Lab, Relativity and Stoke Space, have also secured contracts.

"The US government wants competition and it is investing for competition," says Meyerson, former Blue Origin president and chief executive of Intertune, a space mining start-up. "There is still a significant margin [for launch providers] because there are only a few operators out there."

Attempting to get back on track, Blue Origin has sought staff to fly into Florida from its various bases including its headquarters in Kent, Washington, to assist with the facilities' recovery, according to multiple employees. The company is planning to run 24/7 operations for part of the year and has conceded that workers will face a demanding schedule for months, they add.

Even with concerns about workload, staff maintain the company's overall objectives remain paramount.

"We're here because we believe in this mission. We believe in space," one Blue Origin employee says.

Graphic illustration by Ian Bott