

Bezos' Blue Origin announces plans for private space station

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The core module of Orbital Reef is seen in an artist's illustration, courtesy of Blue Origin.

Jeff Bezos' Blue Origin on Monday announced it wants to launch a space station that will house up to 10 people in the second half of the decade, as the race to commercialize the cosmos heats up.

"Orbital Reef," described in a press statement as a mixed-use business



park in space that will support microgravity research and manufacturing, is a joint venture with commercial space company Sierra Space and has the support of Boeing and Arizona State University.

"For over sixty years, NASA and other space agencies have developed orbital <u>space flight</u> and space habitation, setting us up for commercial business to take off in this decade," said Blue Origin executive Brent Sherwood.

"We will expand access, lower the cost, and provide all the services and amenities needed to normalize space flight."

The private outpost is one of several planned in the coming years as NASA considers the future of the International Space Station after the 2020s.

The <u>space agency</u> holds a contract with a company called Axiom to develop a space station that will initially dock with the ISS and later become free-flying.

Last week, space services company Nanoracks, in collaboration with Voyager Space and Lockheed Martin, announced a planned <u>space station</u> that will be operational by 2027 and be known as Starlab.

According to a fact sheet released by Blue Origin, Orbital Reef will fly at an altitude of 500 kilometers (310 miles), slightly above the ISS, with inhabitants experiencing 32 sunrises and sunsets a day.

It will support 10 people in a volume of 830 cubic meters (30,000 cubic feet), which is slightly smaller than the ISS, in futuristic modules with huge windows.

The ISS was completed in 2011 and has long been a symbol of US-



Russia space cooperation, though Moscow has recently equivocated on the future of the partnership.

It is currently rated as safe until 2028 and new administrator Bill Nelson has said he hopes it will last until 2030, by which time NASA wants the commercial sector to step up and replace it.

Blue Origin is currently only able to fly to suborbital space with its New Shepard rocket, which blasted Star Trek actor William Shatner beyond the atmosphere, earlier this month.

Its other planned projects include New Glenn, a rocket that can fly cargo and people into orbit, and a <u>lunar lander</u>—though it lost the Moon contract to rival SpaceX, and is suing NASA to try to reverse that decision.

Bezos, the second richest man in the world thanks to e-commerce giant Amazon, founded Blue Origin in 2000, with the goal of one day building floating space colonies with artificial gravity where millions of people will work and live, freeing Earth from pollution.

These colonies would be based on a design by Gerard O'Neill, Bezos' physics professor at Princeton, and would consist of counter-rotating cylinders providing artificial gravity.

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