

News > World

US adventurer becomes first human to reach deepest points of each five oceans

Victor Vescovo and his crew, of the Five Deeps expedition, shed light on their groundbreaking mission

WORDS AND VIDEO BY ROB LE MARE |1 day ago | 💭 0 comments





The ocean's equivalent of SpaceX have arrived in London.

This week, London welcomed the world's only reusable Deep Sea Vehicle (DSV) Limiting Factor, capable of return journeys to the deepest parts of the ocean.

In a landmark breakthrough for deep sea exploration, the state-ofthe-art submersible enabled US adventurer Victor Vescovo to become the first person to visit the deepest points in every ocean. These depths are known as the Hadal zone and four of them had never been visited by humans before.

Mr Vescovo, a millionaire private equity investor, financed the dives which took place over the last 10 months. The retired naval officer has previously completed the 'Explorer Grand-Slam' which includes climbing the seven highest peaks on Earth as well as reaching the North and South Poles.

Mr Vescovo, originally from Dallas, Texas, told the Standard: "I want everyday people to have a lot more interest in the oceans and be excited about it."





The 12-tonne submersible, with a top speed of roughly 1.5 metres per second, was launched from a dedicated support ship, the DSSV Pressure Drop. Limiting Factor represents a giant leap in Deep Sea exploration technology. It took 26 month to build after a year in the design phase.

"This is the first time humans have had a reusable vehicle that can go to any depth, any ocean, virtually any time," said expedition leader Rob Macullum of EYOS expeditions. "We're able to do that five times in an eight day period and we could have done that every second day if we'd wanted to. It's a fantastic machine."

"It's capable of diving to 36,000 feet or full ocean depth and carrying two people" said Patrick Lahey, president of Triton submarines who built the submersible. "For us, I didn't just want to build a sub that would do a handful of dives and then be relegated to a museum. I wanted us to build a commercially viable craft that would have a life expectancy that would be measured in decades and thousands of dives."





Victor Vescovo with submersible named Limiting Factor (Five Deeps expedition)

Limiting Factor has small windows with wide angle lenses to maximise its viewing angle for the pilot and passenger. There are also situational awareness cameras placed around the vehicle to assist with visibility.

The pressure when Limiting Factor is at the bottom of its deepest dives is roughly equivalent to the weight of 291 fully laden jumbo jets. The cabin is pressure resistant so the conditions for those on board is the same as surface pressure.

As no daylight reaches the deepest parts of the ocean, lights are positioned on the submersible. They allow they allow the pilot to see up to 200 metres ahead.



An individual, as opposed to a government, privately funding such expeditions draws comparison with Elon Musk of SpaceX. As Mr Macullum said: "I think the trend that you're seeing in ocean philanthropy, ocean science, is similar to what we're seeing in space travel. We're seeing private philanthropists come in with a much more nimble, much faster approach to advancing the technological needle."



Victor Vescovo boards submersible Limiting Factor in Antarctic Ocean (Five Deeps expedition)

Don Walsh, 87, an oceanographer who manned the submarine that first made the descent into the Mariana Trench in 1960, came on board the ship for 10 days of its journey. Mr Walsh told the Standard: "Between five and 15% of the world's oceans have been explored. Think about that, we're going to send people to Mars and the moon and we don't even know what's going on on our planet. The ocean is fundamental to everything on our planet and we don't understand fully how it works."



Chief scientist on board the ship Alan Jamieson said: "A lot of people sort of have this preconceived notion that the deepest points of the ocean are not particularly interesting. They're some sort of barren, lifeless landscape. That's not true at all. I can tell you by looking at the mud on the bottom, which trench it came from. You can tell by the local diversity and the geology, they are really quite different.

"Most of planet Earth is 4000 meters deep. It's the bit that no one seems to care about because humans have an intrinsic fear of the water. And what I want to do is blur that line between the sea that we like and we want to conserve and the bit we would like to ignore. There's no need for that it should just be one entire body of water, the ocean is the ocean, it doesn't have these man made lines drawn in it."

Whilst undertaking the dives, the crew discovered 40 new species. They also found manmade pollutants from the 1950s inside sea creatures, as well as a plastic bag and sweet wrappers at the bottom of the Challenger Deep, the deepest known point on Earth. Water samples have been taken throughout the dives at various depths which await scientific analysis.





Preparing Limiting Factor in the Pacific Ocean (Five Deeps expedition)

As for Mr Vescovo, his days of adventuring are far from over."I'd love to go into space. I've been flying since I was 19 years old, and I've always had that dream."

A five-part documentary about the Five Deeps Expedition, made for the Discovery Channel by Atlantic Productions, is likely to air early next year.

