

Titanic Wreck is Being Consumed by Ocean Microbes



For the first time in 14 years, the *RMS Titanic* wreck has been visited by a human-occupied vehicle: the Triton 36,000/2 (known as Limiting Factor). This manned submersible, capable of diving to full ocean depth, reached the bottom of the North Atlantic Ocean (3,810 metres/12,500 feet) in a ground-breaking expedition in early August. An exploration team from Triton Submarines completed a total of five dives to the wreck over an eight-day period of time at the *Titanic*'s final resting place 370 miles south of Newfoundland, with Triton President and co-founder Patrick Lahey piloting three of the five dives. The last human-occupied submersible dive to the *Titanic* was in 2005.

Submersible Camera System

Following established US legal protocols and under the observation of an onboard NOAA representative, the team of experts and scientists examined the remains of the ship, capturing for the first time extraordinary native 4K footage using specially adapted cameras, to capture the wreck in a way it's never been seen before. Using the submersible camera systems, the team performed dedicated photogrammetry passes on the wreck, allowing highly accurate and photoreal 3D models of *RMS Titanic* to be produced. These assets will help assess the wreck's current condition and project its future, as well as making it possible to visualise the wreck using augmented reality (AR) and virtual reality (VR) technology.

Consumed by the Ocean

Triton Submarines President and co-founder Patrick Lahey said of the dives: "The most fascinating aspect was seeing how the *Titanic* is being consumed by the ocean and returning to its elemental form while providing refuge for a remarkably diverse number of animals." The scientists on the expedition will publish the full results alongside a documentary film being made by [Atlantic Productions London](#).

Ceremony in Honour of the Victims

Lying almost 4,000 metres beneath the surface in bitterly cold 1°C water, the wreck has become vulnerable to sweeping eddies and subjected to ever-changing sea currents. Salt corrosion, metal-eating bacteria and deep current action are having the greatest impact on the wreck. While on the site, the team laid a wreath and held a ceremony in honour of those who lost their lives on that fateful night in 1912.

"Where to take it Next"

Victor Vescovo, CEO of Caladan Oceanic and the submersible's chief pilot remarked: "We were able to repeatedly take the Limiting Factor down to the most historic ship lying on the ocean floor. Our success on *Titanic* clearly demonstrates we now have a proven system that can easily and repeatedly visit any ocean wreck, at any depth, anywhere in the world, and study it in detail. We're seriously thinking about where to take her next."

Rob McCallum of [EYOS Expeditions](#) was in charge of planning and permission. A team of Triton crew members were on site for the *RMS Titanic* dives, ensuring that each dive was made safely, and included Patrick Lahey, Tom Blades, Kelvin Magee, Frank Lombardo, Steve Chapelle, Tim McDonald, Shane Eigler and Colin Wollerman.

About Triton Submarines

[Triton Submarines](#) of Sebastian, Florida, is a civil submarine producer and the contemporary manufacturer of acrylic and titanium pressure-hull- equipped personal submarines to deliver multiple classed and certified vessels capable of diving to 3,300 feet (1,000 metres) or more. One of the Triton Submarines is involved in [The Five Deeps Expedition](#) project (article published in Hydro International May/June 2019 issue).

Photo: The bow of the *RMS Titanic*, which lies at the bottom of the Atlantic Ocean about 370 miles south of Newfoundland. Much has changed at the site since it was last visited 14 years ago. Credit Atlantic Productions.