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Take a dive to see the remains of the Titanic

Starting in 2018, an expedition to the final resting place of the ill-fated luxury liner will cost you \$105,129. <u>MICHAEL D'ESTRIES</u>

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In the race to digitally map the wreck of the Titanic in great detail before it disappears, researchers are turning to tourism to help off-set expedition costs. (Photo: <u>OceanGate, Inc.</u>)

More than a century after it slipped under the waves at 2:20 a.m. on April 15, 1912, the RMS Titanic remains a constant object of fascination, intrigue and ever-evolving legend. Unfortunately for those determined to solve the mystery behind her ill-fated maiden voyage, the window of opportunity to study what remains of the ship will soon come to a close.

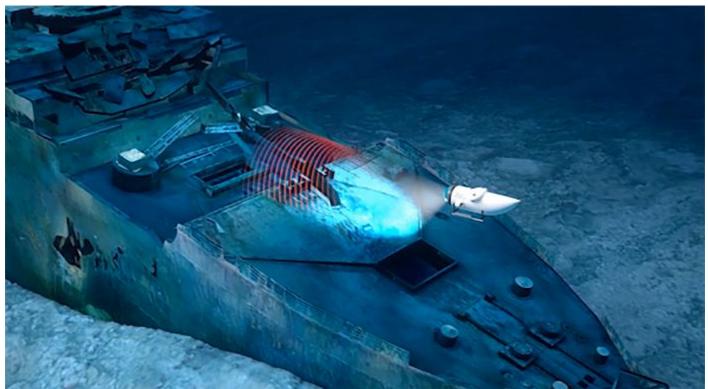
<u>According to a 2016 study</u>, what remains of the Titanic will likely be little more than a rust stain on the ocean floor by 2030. This rapid deterioration is due to the presence of <u>a unique species of bacteria</u>, *Halomonas titanicae*, that feeds vociferously on the ship's steel.

"We tend to have this idea that these wrecks are time capsules frozen in time, when in fact there all kinds of complex ecosystems feeding off them, even at the bottom of that great dark ocean," Dan

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Conlin, curator of maritime history at the Maritime Museum of the Atlantic in Halifax told Live Science in 2010.

With the clock ticking on the Titanic appearance as a ship and not a collapsed mass of rust, researchers are preparing a series of scientific expeditions to the site starting in 2018. The missions are being organized by OceanGate, Inc., a private submersible company, in collaboration with experts from the Advanced Imaging and Visualization Laboratory (AIVL) at the Woods Hole Oceanographic Institution.



OceanGate plans on using an advanced new submersible called the 'Cyclops 2' to 3D scan the wreck of the Titanic in unprecedented detail. (Photo: OceanGate, Inc.)

Over seven weeks, from May to July 2018, the expedition will conduct a detailed 3D scan of the wreck site (using similar, advanced technology to capture those <u>haunting 3D scans of centuries-old</u> <u>wrecks in the Black Sea</u>), as well as record new high-definition videos and photos, and collect data on the flora and fauna inhabiting the ship.

"Documenting history is important in and of itself," OceanGate CEO and co-founder Stockton Rush <u>told TechCrunch</u>, "but on the geeky side of this, it's also a real challenge to understand things like the decay rates of metals in deep sea environments. With fuel and munitions and other things from WWII, we need to understand the interaction between currents, oxygen content, bacteria, the nature of a given material and so on to know if a hull might collapse and you end up with an oil spill from something that sank in 1944."

How you can become a 'mission specialist'

Because these expeditions involve serious capital to pull off, OceanGate is also opening up opportunities in the coming years for deep-pocketed Titanic enthusiasts to take part. For \$105,129, equivalent to the cost of First Class passage (\$4,350) on Titanic's maiden voyage after adjusting for inflation, qualified individuals can join the submersible teams as a "mission specialist." Unlike past tourism opportunities to Titanic, these guests will be fully involved with assisting experts in achieving

underwater missions; including dive planning, sonar operation, communication from ship to sub, videography and much more.

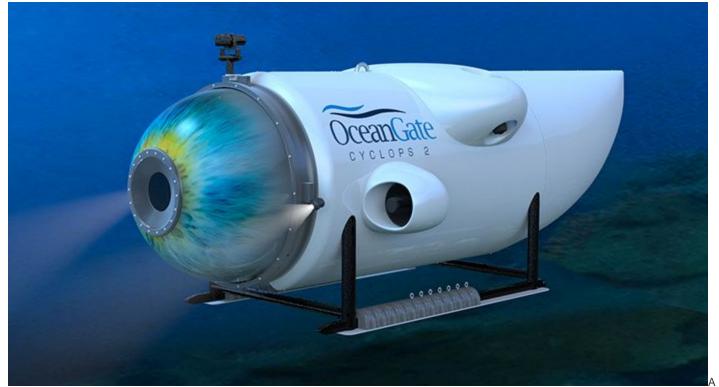


The bow of the Titanic as captured during a sonar mapping expedition in 2012. (Photo: Woods Hole Oceanographic Institution)

According to Rush, the 54 mission specialist positions offered for 2018 have already sold out, representing over \$5 million in funding for the expedition's scientific pursuits. And if you're kicking yourself for missing out, don't worry: the research team says its survey of the wreck site will involve multiple missions performed over the next several years. More than a hundred more opportunities to purchase a ticket to visit the wreck site may become available in the near future.

"Since her sinking 105 years ago, fewer than 200 people have visited the wreck, less than have flown to space or climbed Mt. Everest, so this is an incredible opportunity," Rush <u>told Forbes</u>.

It's also worth noting that the wreck site itself will not be disturbed, nor will any artifacts be collected. OceanGate says its teams will follow guidelines established by UNESCO and the National Oceanic and Atmospheric Administration (NOAA) for the for the preservation of underwater world heritage sites.



rendering of the Cyclops 2 submersible. The sub will seat five people and come equipped with advanced 3D mapping technology and highdefinition 360-degree cameras. (Photo: OceanGate, Inc.)

As for the technology used to take its teams down the more than 12,500 feet to Titanic, the company has developed a new submersible called the Cyclops 2. Made of carbon fiber and titanium, the sub seats five and offers a stunning 21-inch wide viewport — the largest such window to ever look over wreck site.

OceanGate plans to being open sea tests of the Cyclops 2 next November. If you're interested in joining future expeditions to visit the Titanic, you can review the FAQ and <u>eligibility requirements here</u>.