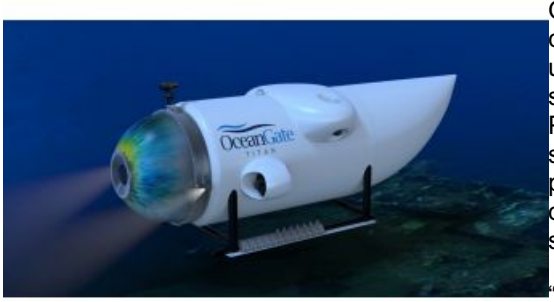
iXblue Equips Manned Submersible for New 'Titanic' Survey Expedition



OceanGate, a provider of manned submersible services, and iXblue, a global company that provides innovative solutions for navigation, positioning and underwater imaging, are combining forces to conduct the first manned submersible expedition to the wreck of the RMS '*Titanic'* since 2005. iXblue's Phins 6000 inertial navigation system and Posidonia USBL positioning system will both be used for the accurate and reliable navigation and positioning of OceanGate's '*Titan',* the newest addition to the company's fleet of deep -sea manned submersibles and the first privately owned manned submersible capable of reaching '*Titanic'* depths.

"Our submersible pilots have relied on Phins from iXblue on our fleet of manned submersibles for several years," said Stockton Rush, OceanGate CEO and Chief Pilot. "With iXblue our pilot can safely navigate around shipwrecks because we know almost exactly where we are. Plus, the location is sent to the surface, so the operations crew can track our location in real time. The accuracy of the location data also allows the dive team to better track the areas of the dive site that have already been scanned or filmed, eliminating redundant scans and reducing the risk of missing key images of the wreck."

4K images of the Titanic shipwreck

iXblue's strap-down Fiber-Optic Gyroscope (FOG) technology, Phins 6000 subsea Inertial Navigation System (INS) provides accurate position, heading, attitude, speed and depth information as the manned submersible captures laser data and the first ever 4K images of the RMS *Titanic* shipwreck and debris fields. Its high-accuracy inertial measurement unit is coupled with an embedded digital signal processor that runs an advanced Kalman filter for optimum positioning of the subsea vehicle.

> OceanGateâ€™s Titan, the newest addition to OceanGate's fleet of deep sea manned submersibles and the first privately-owned manned submersible capable of reaching Titanic depths.

Increased positioning precision of *Titan* on the shipwreck site will be provided by Posidonia, iXblue's long range and high accuracy USBL system that is operated from the surface ship and will be calibrated thanks to a Phins surface INS. Designed to track subsea vehicles to depths of 6,000 meters at ranges reaching over 10,000 meters, Posidonia uses advanced acoustic modulation, as well as digital signal processing technology and operates in the low frequency band for deep sea tracking operations. To communicate with Posidonia during each dive, *Titan* is equipped with iXblue's MT8 compact low-frequency transponder.

"Everyone at iXblue is very excited to be part of the Titanic Survey Expedition", stated Marine Slingue, sales director at iXblue. "We are thankful for the renewed trust OceanGate puts in us after a first partnership back in 2016 for the survey of the iconic wreck of Andrea Doria. It is a real vote of confidence for our products to be chosen again -- especially to explore and help survey the world's most famous shipwreck. We are proud to be helping OceanGate explore, record and understand the undersea world at such great depths."