

# Preparing for a Suborbital Research Flight Via a Submersible Dive to the *RMS Titanic*

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## Overview

In late 2020, a pair of experiments we proposed to NASA STMD were selected to fly with one of us (PI Stern) aboard a Virgin Galactic suborbital spaceflight for NASA.

In mid-2022, PI Stern was a crew member on a submersible dive to the *RMS Titanic* 12,400+ feet below the North Atlantic. The dive was aboard Titan, operated by Oceangate.

In this presentation we describe the *Titanic* dive, and certain parallels it presented as a training opportunity for the upcoming suborbital mission, including scientific experiment and vehicle familiarization training, risk management, and physiological challenges.

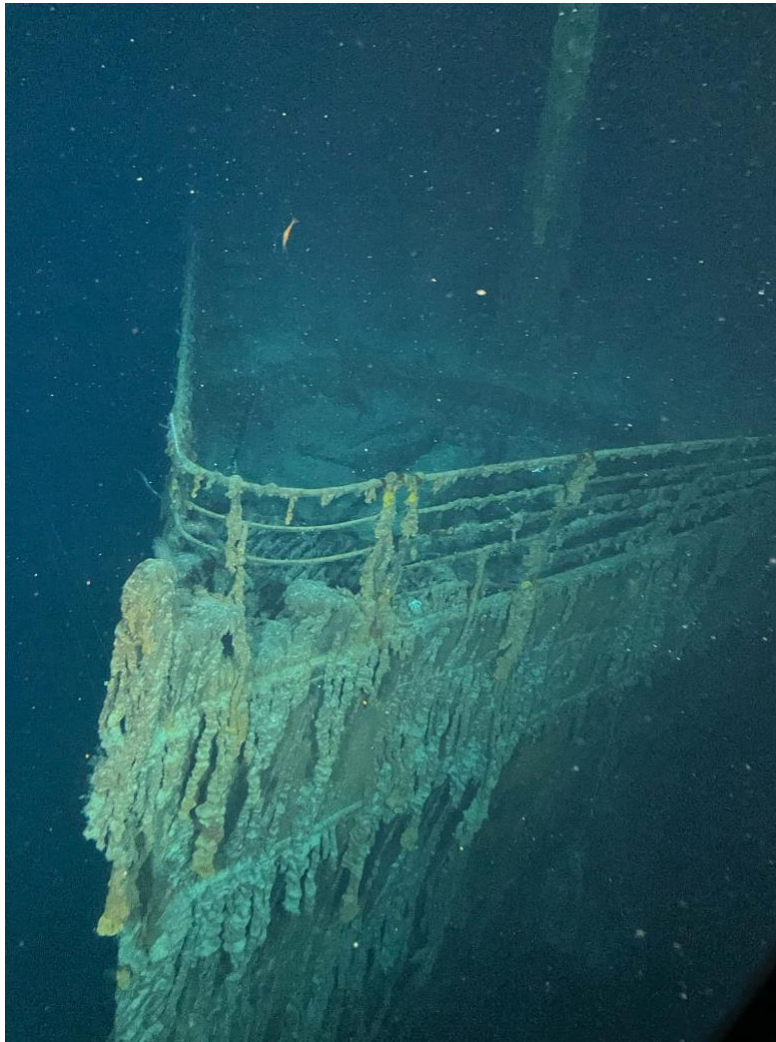


Figure 1: The bow of the *RMS Titanic*, 22 July 2022 (Photo credit: S. A. Stern)