

National Transportation Safety Board

Office of the Chairwoman

Washington, DC 20594



October 15, 2025

Admiral Kevin E. Lunday
Acting Commandant
US Coast Guard Headquarters
2803 Martin Luther King Jr. Ave., SE
Stop 7318
Washington, DC 20593

Dear Admiral Lunday:

This letter provides information about the National Transportation Safety Board's (NTSB) October 2, 2025, report *Hull Failure and Implosion of Submersible Titan, North Atlantic Ocean, 370 nautical miles southeast of St. John's, Newfoundland and Labrador, Canada, June 18, 2023, MIR-25-36*. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at <http://www.nts.gov>.

As a result of this investigation, we identified the following safety issues:

- OceanGate's inadequate engineering process for the *Titan*
- OceanGate's flawed analysis of *Titan* strain gage and acoustic emission (real-time monitoring system) data as a measure of pressure hull integrity
- OceanGate's failure to notify search and rescue assets about its planned expedition
- Insufficient voluntary guidance and US regulations for pressure vessels for human occupancy

Accordingly, the NTSB makes the following safety recommendations to the US Coast Guard. Additional information regarding these recommendations can be found in the noted sections of the report.

- Commission a panel of experts to study current pressure vessel for human occupancy (PVHO) operations, including, at a minimum, the availability of domestic and international design and construction standards; the competency and credentialing of persons on board; the distinction between crew and passengers and whether all PVHOs

should be inspected regardless of operational category; maintenance and operation of submersibles; the effects of operational changes, such as storage conditions and towing; failure modes and best practices; and emergency response procedures, and disseminate findings of the study to industry. (M-25-012) (See section 2.6.)

- Implement US regulations for pressure vessels for human occupancy informed by the findings of the study recommended in Safety Recommendation M-25-012. If necessary, obtain legislative authority to act on this recommendation. (M-25-013) (See section 2.6.)
- Revise Navigation and Vessel Inspection Circular 05-93 to include the revised definition of small passenger vessel as reflected in the Passenger Vessel Safety Act of 1993 and to reflect the findings of the study recommended in Safety Recommendation M-25-012. (M-25-014) (See section 2.6.)
- Propose that the International Maritime Organization make *MSC.1/Circ. 981* mandatory to promote consistent application of pressure vessel for human occupancy rules amongst member states. (M-25-015) (See section 2.6)

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations M-25-012 through -15). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. If your reply, including attachments, exceeds 20 megabytes, please e-mail us at the same address for instructions on how to send larger documents. Please do not submit both an electronic copy and a hard copy of the same response.

Sincerely,

[Original Signed]

Jennifer L. Homendy
Chairwoman
On behalf of the entire Board

cc: Mr. Jason Neubauer
Captain Evelyn Samms
Mr. Omar La Torre Reyes