

# PRESS RELEASE



## **STANDARD GUIDE FOR CONDUCTING SMALL BOAT AIR-INCLINING STABILITY TEST: (Lightweight Survey and Air Inclining Test to Determine Lightweight and Centers Of Gravity)**

The Society of Naval Architects and Marine Engineers has published a new technical and Research Bulletin, Standard Guide for Conducting Small Boat Air-Inclining Stability Test: (Lightweight Survey and Air Inclining Test to Determine Lightweight and Centers of Gravity). This T&R Bulletin was developed under the Small Craft Committee of the Society in conjunction with the Ship Design Committee's Ship Stability Panel.

The bulletin covers the determination of a small boat's lightcraft weight and center of gravity characteristics expanding on the guidance given in ASTM F3052 (2014). The procedure can be considered to consist of two separate tasks: 1) a scale weighing/deadweight survey that determines the weight and longitudinal center of the craft and 2) an air-inclining experiment that determines the vertical center of gravity. Although not required, the inclining test is strongly recommended for small craft upon their construction completion and/or after major conversions, especially for a first of class or type that will be subject to stability analysis and/or whose weights will be monitored for stability compliance.

The complete experiment comprises weighing the craft from two points at different longitudinal locations then moving a known weight a known distance transversely across the craft to induce a heel angle, which is measured. It is typically conducted indoors and an enclosed facility to protect the vessel from any outside environmental disturbances.

The new publication is identified as Technical and Research Bulletin 9-1. It is a 29 page report issued electronically and may be ordered for \$40 (\$20 for SNAME members) through the SNAME web site (<http://www.sname.org/pubs/viewtechnicalpaper?DocumentKey=a3f68694-dad2-4a4c-a7cc-d3968658c44e>) or by contacting Kristin Walker at [kwalker@sname.org](mailto:kwalker@sname.org) or (703) 997-6710.