



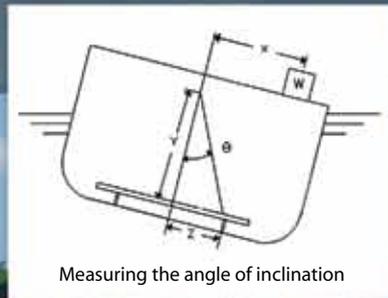
## Anchors Aweigh: Rice Lake test weights tip the boat

"I have an odd question," Drew Hains, working for a naval architecture and marine engineering firm, began his email. "My firm does stability testing on boats and ships, and we have rented your 1000lb NIST Class F Cast Iron Test weights. We are currently looking to do a similar test in the U.S. Virgin Islands and are having problems finding a local vendor for test weights... I realize this is an odd request and has little to do with you selling these products, but it is hard for us to locate local suppliers."

Chris Olsen, inside sales manager, sent Drew's request to the Rice Lake international group that covers the Caribbean and Latin Americas. Chris sent Drew a reply, "You will be provided with some dealers who potentially have some of our test weights in those markets. I am curious, what do you use them to test? Normally they are put on a truck scale for a yearly calibration."

Drew explained, "To answer your question, we do stability testing on ships and other small craft such as yachts. With larger ships, large blocks of concrete (which are weighed before the test) are often used; however with smaller vessels where deck space is tight, your 500, 1000 and sometimes 2500 lb test weights are ideal and are easy to handle. They have the added benefit of being certified weights, thus there is little question about accuracy. On some smaller vessels we have used the 50lb weights and moved the weights by hand during the test. Basically the test weights are placed on board and then moved transversely from side to side to apply a known moment as the heel angle is measured. Using the principles of naval architecture, the vertical center of gravity is then calculated. Thanks for the prompt response."

Drew B. Hains, PE  
Murray & Associates, L.L.C.  
Fort Lauderdale, FL



Measuring the angle of inclination

