## Naval Architects & Engineers

Project Updates

Our High Performance Cluster (HPC) has gone through some serious run time over the past several months.

We've just completed a 3-D propeller flow analysis where we investigated the water flow into different propeller configurations and predicted the effects on the rudder and hull structure. Our results demonstrated a very good correlation with what the ship was experiencing and provided an insight into the corrections that needed to be made to move forward.
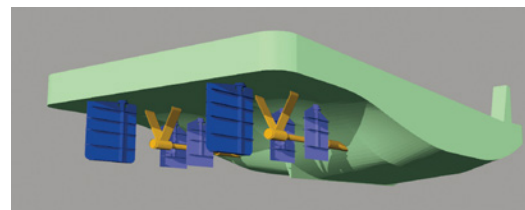
Overall geometry of study vessel for 3-D propeller flow analysis

We've also completed a thermodynamic analysis that involved hot fluids in hull tanks that were surrounded by cofferdams that were, in turn, surrounded by cool ocean water. We calculated the various temperature gradients through the hull structure, verified our findings with temperature recordings and then reworked the existing structure so the failures that had been occurring would cease.

We're also proceeding with the modifications of a Platform Supply Vessel (PSV) conversion to a Well Testing Vessel (WTV). This has become a big project that has had a number of major tankage and significant deck structural modifications to support the process equipment. ACMA is also providing a two-man team to support the owner day-to-day and field the daily barrage of questions generated by the yard.

Finally, ACMA has also had a number of stability jobs and on-going ship passing mooring analysis projects to provide a steady baseline of work.

SNAME 2012

The SNAME 2012 Annual Meeting and Expo, held in Providence, Rhode Island, from October 23rd to 26th, provided an excellent opportunity for networking and featured high-profile panels with interactive discussions that included "Polar Patrol", "Fast Service, Patrol, and Combat Craft", "Offshore Wind and the Role of Naval Architects, Marine Engineers, and Ocean Engineers" and "Indigenous Naval Architecture."

As always, the Expo gathered the best marine products and technologies representing all aspects of the design, production, maintenance and operation of ships, submersibles, small craft, as well as offshore and ocean bottom structures.

J/22s competing in the 4th Annual SNAME Cup Sailing Regatta

On Saturday October 27th, SNAME hosted the 4th Annual SNAME Cup Sailing Regatta, with ACMA sponsoring one of the J/22s that competed on the waters off Newport, Rhode Island.

Alan C. McClure Associates, Inc.

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From the Top

Although the year started on the slow side, it definitely ended with a bang. And that's always encouraging.

What's less than encouraging is the attitude we see too often: that technology-intense projects are "engineering optional." Unfortunately, this leads to projects that falter and grind to a snail's pace because there simply isn't enough engineering done prior to getting started. And, once the engineering is finally turned on, it takes time to provide the answers that the fabricators need in order to move forward. That lost production time will never be recaptured.

As a Texas board-certified engineering company, ACMA makes every attempt to provide a professional product that will meet all the requirements, including sound engineering. It all goes back to the lessons we all learned in Project Management 101 — engineering is your friend!

And, finally, speaking of friends, all of us at Alan C. McClure Associates wish you and yours a happy and safe holiday season.

Scott C. McClure, President

[signature]

Dan Dabrowski: A Knack for Numbers

Dan Dabrowski began dreaming of becoming a Naval Architect in the 8th grade. Luckily for him, he had a knack for math, logic and science – all the tools he'd need to eventually fulfill his dream.

However, unlike so many who eventually practice naval architecture, Dan didn't grow up logging long hours on the water in a variety of boats. Instead, he spent his time in the water as the captain of his swim team.

And, Dan's path to a career in naval architecture wasn't exactly in a straight line either.

Along the way, he spent a few years selling cameras (very successfully) at a major consumer electronics store. He also spent a few years at Henry Ford Community College where he focused on courses that could be transferred toward a degree in Naval Architecture and Marine Engineering.

It all paid off when he graduated with a Bachelor of Science and Engineering degree (Naval Architecture and Marine Engineering) in 2009, followed in 2010 with a Master of Science and Engineering degree from the University of Michigan.

Of course, landing a job in his chosen profession didn't happen overnight. Even though Dan had some impressive accomplishments to his credit at the University of Michigan, including founding the UM::Autonomy, Autonomous Surface Vehicle (ASV) team in his junior year and serving as its president in his senior year, his search to find a home at ACMA took another 2 years.

Having visited family in Texas, Dan knew the Lone Star state offered a number of advantages.

Dan Dabrowski

A booming economy, along with an exceptionally low cost of living, made Texas one of Dan's primary targets. When a friend who'd gotten his start at ACMA suggested he check out the company, Dan took a look at the company website, liked what he saw and set up an appointment with company president Scott McClure.

Scott apparently liked what he saw as well and, early last month, Dan became the newest member of the ACMA team.

Season's Greetings
Alan C. McClure Associates, Inc.

Wishing You Fair Winds for the Holiday and Calm Seas for the New Year.