



Crewboat Delivered to Maryland Environmental Services

ACMA recently completed its contract to deliver a customized crewboat, built by SeaArk Marine, Inc., to Maryland Environmental Services. The 48' Dauntless Class all-welded aluminum crewboat is a deep-vee hull and was designed to transport officials and dignitaries to view the progress being made in reclaiming wetlands for the Poplar Island Project on Maryland's Eastern Shore in the Chesapeake Bay.

Powered by twin 580 hp Cummins diesel engines driving the Hamilton waterjets, the vessel can reach a speed of 27.7 knots. The vessel is climate-controlled and is outfitted with the latest navigation and operations electronics, has accommodations to carry 28 passengers and is USCG-certified.

ACMA's initial efforts were focused on defining the requirements and general

overall characteristics that would be required of the vessel in its operating environment.

ACMA then developed the specifications for bid and evaluated the responses to the bid packages.

Once the project was underway, ACMA's responsibilities included overseeing construction, managing change orders and providing owner's representation throughout the project. ACMA also worked closely with the owner and shipyard during sea trials.

On completion of the project, ACMA verified the delivery punch list, and observed load-out and securing for the vessel's final transportation to Maryland's Chesapeake Bay.



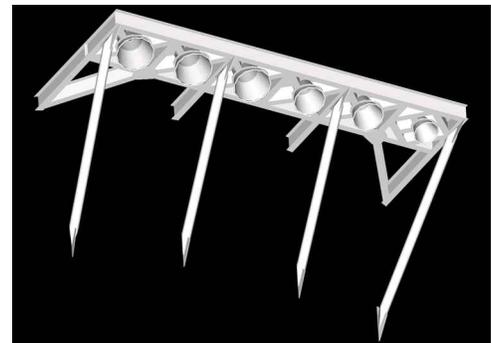
The Dauntless Class Crewboat

ConocoPhillips – Venezuelan FSO Highlights High Tech Capabilities

ConocoPhillips' FSO project in the Gulf of Paria, along the northern coast of Venezuela, has given us a unique opportunity to showcase our high-tech capabilities, particularly our FEA software ANSYS and our hydrodynamic package AQWA.

Our assignment includes design and analysis on the spread mooring system, assisting on procurement management, detailed fabrication design of turndown sheave foundations, chain-stopper

foundations, riser porch and riser design and analysis. ACMA assisted in incorporating the change from a yoke tower mooring system to a spread system that has put the mooring design project on a fast track. The project's major emphasis has focused on minimizing the impact on the hull design consistent with the operations of the FSO and off-take tanker.



CAD drawing of the riser porch



From the Top

During the past year, ACMA has seen a growing interest in LNG and CNG technology that utilizes specially-built vessels to transport natural gas from the world's largest and most difficult to reach reserves. Of course, the world's increased interest should come as no surprise, since natural gas accounts for about one quarter of all energy used in the United States. And, according to the Energy Information Administration (EIA), LNG provides one percent of our natural gas, a figure they estimate could triple by 2020.

One of the challenges currently facing LNG or CNG importation is the siting of marine terminals. We believe the solution will require moving terminals completely offshore. To that end, ACMA is involved in the development of several LNG projects. We are also continuing to work closely with EnerSea's CNG transport system as it moves forward with the design of a direct production gas shuttle ship for the Gulf of Mexico.

As for the future of LNG and CNG, ACMA is looking forward to continuing its significant role in finding the solutions that will provide the clean-burning natural gas to help meet the growing demand for energy.



Scott C. McClure
President



Built by Samsung Heavy Industries, the unit will have a 1.3 million barrel capacity, be moored in a shallow 28.5 meters of water and have 6 risers.

According to ACMA President Scott McClure, "We were selected for this assignment because ACMA is perceived as a 'one stop solution' and, as an independent, we have the ability to analyze and review without prejudice or bias."

Currently, the ACMA team is completing the final stages of the project, working with riser suppliers, as well as installation details.

Biking for Bucks

The ACMA Knots saddled up once again to participate in the MS 150, a 2-day, charity bike ride that covers over 150 miles from Houston to Austin, Texas and supports the vital research that's seeking a cure for multiple sclerosis. This year's event attracted over 13,000 cyclists and 6,000 volunteers, and generated over \$8.5 million dollars in donations raised through pledges from friends, family, business associates and corporate sponsors.

This year's ACMA team included Scott McClure, Charolotte McClure, Andrew Bohlin and Michelle Hargrove, along with her husband, Mark, and daughter, Myers. The support crew included Carol McClure, Nathalie McClure, Dusty Hardin, Emily Rather and Michelle's mom, Linda Toll.

We're also proud to report that when the dust settled from last year's event, Scott McClure was recognized as a member of the Top 300 Club (#218), a special designation reserved for those who generate the most funds through donations.

Lars Ronning – Always A Learning Experience

Little did Lars realize when he graduated from the University of British Columbia with a degree in Mechanical Engineering that his education had just begun.

Following his initial stint as an Engineer at ABS Americas in Houston, Texas, Lars joined the ACMA team in 1999 and, with his affinity for computers, was soon identified as the "IT Guy". Over the past several years, Lars has developed and modified a variety of in-house computer programs and has taken on the title of System Administrator for the company's computer network.

"The development of sophisticated hardware and software allows us to obtain information faster and verify it at an earlier stage," notes Lars. "By integrating software that speeds up the analysis process, we bring a real value to our clients by providing them more information at a lower cost."

And while Lars' education in the IT world continues on a fast track at ACMA, so does his education as an engineer with the variety of projects he's been exposed

to. "Almost every project is different," says Lars, "and each intriguing project allows me to grow as an engineer."



Lars Ronning
Senior Naval Architect

One of his favorite projects to date involved providing technical assistance on a lawsuit involving the the design and construction of a semi-submersible platform. "It required a combination of detective work and teaching so a team of attorneys could effectively argue the technical merits of the case. The process of teaching not only re-confirmed my training, it also caused me to discover some new insights."

What does Lars like best about his job? "At ACMA, engineers operate in a 'hands on' environment; we get to go out and touch the actual project. Just so much more can be learned." It's that kind of continuing education that makes ACMA an ongoing learning experience.

McNotes is published by
Alan C. McClure Associates.

Founded in 1975, Alan C. McClure Associates, Inc. (ACMA) is one of the industry's premier naval architecture and engineering firms. Headquartered in Houston, Texas, we've provided advanced design and engineering services to our international clientele in offshore exploration, production and marine transportation for over 29 years.

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