McNotes

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Terminal Project Reinforces ACMA's LNG Experience

ACMA recently completed the first phase of permitting for a new LNG import terminal project for Australia's largest publicly traded oil and gas exploration and production company.

In conjunction with Mustang Engineering, ACMA provided services that assisted its client in responding to hundreds of permit data needs for the permitting of an import terminal for natural gas. Along with its knowledge of current industry operations as it pertains to HAZID and HAZOP, ACMA also provided all of the solutions for the marine service aspect of the project, including vessel loading and off-loading, spill containment and environmental impact review, ship maneuvering and tug assistance, and buoy loading issues. In addition, ACMA worked closely on Mustang

Engineering's patented re-gasification technology for marine systems and its integration into a marine environment.

"Our growing expertise in LNG is reinforced by our knowledge of the technologies and materials that are required in its handling," said ACMA President Scott McClure. "Our involvement in this terminal project has further broadened ACMA's knowledge of the issues surrounding LNG, its handling, transportation, loading and offloading."

The prepared information was presented to local, state and federal authorities, and ACMA is currently awaiting comments and approval to move forward with the next phase of this project.

K-Sea's Pin Connector System: Designed for Fast, Cost-Effective Modifications

ACMA has finished the complete modification design package for K-Sea Transportation Partners, L.P. The modifications involve the addition of a Beacon Maritime JAK integrated pin connector system for their barge, the DBL 134, and tug, VIKING.

ACMA's Vice President Darrel Harvey noted that the project involved a number of challenges. "Our focus was on how to make the modifications in a quick and cost-effective manner, thereby minimizing vessel time in the shipyard," said Harvey. "ACMA did all of the structural analysis using both simplified beam analysis and Finite Element Analysis (FEA). We also provided contract level of detail drawings as well as a Construction Specification for the tug as well as for the barge." K-Sea recently awarded the contract and the work will begin in the first quarter of 2007. "We're talking to K-Sea about "babysitting" these projects as they are being done in the shipyard," said Harvey. "With our knowledge of ship construction/ modification and

welding practices, it would be a natural fit since we did the engineering and understand the overall project scope."

"K-Sea is a valued customer," said Scott McClure. "The ACMA team has always been committed to doing whatever it takes to make their projects a success."



Pin receptor post modification to a barge.

Alan C. McCLURE ASSOCIATES, INC.

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From the Top

I'm delighted to report the past year has been an extremely busy one for the ACMA team. Even better...we don't expect the pace to slow down in 2007.

However, while I reflect on all of the advances our industry has made, I'm concerned about one issue in particular and I hope in the coming year we can create some dialogue on this very important topic.

It seems over the past few years, some companies have taken the position that any Intellectual Property developed by a third party should belong exclusively to the contracting company. Therefore, the knowledge gained can't be used in conjunction with other concepts and ideas to form new and improved applications.

That's contrary to the step-by-step process that has always been the foundation of engineering advancements. A shared concept, like a rising tide, raises all ships. With that in mind, we believe Intellectual Property should be shared, with reasonable limitations, for the benefit of the engineering community in particular and industry in general.

I'd like to hear your thoughts.



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 30 years.

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Wishing you calm seas for the holidays, and fair winds for the New Year.

Henry Reeve: Born to Build Boats

Like so many naval architects, Henry Reeve's interest in boats began at a very early age. Born in Vancouver, Canada, Henry began sailing when he was 5 years old. He's made it a point to be around boats ever since.

With a Bachelor of Science, Chemistry, degree, a Bachelor of Applied Sciences, Mechanical Engineering (Naval Architecture Option) degree and a Master of Engineering, Naval Architecture and Offshore Engineering degree under his belt by 1997, Henry was finally ready to join the world of naval architecture. He began his career at the American Bureau of Shipping (ABS), Americas Division, in Houston, Texas, where he worked as an engineer in the Offshore Engineering Department.

In 2000, Henry left ABS to join Offshore Model Basin as a Senior Naval Architect. Here, Henry spent half his time setting up and testing models; the other half writing reports and proposals.

Within a few years, Henry returned to ABS, when the company opened up a new program in safety analysis and accident investigation. As a member of the safety analysis group, Henry prepared casualty briefs and reports as a member of the casualty investigation team.

Henry's first contact with ACMA came through his membership in SNAME where he met Scott McClure. When Scott heard of Henry's desire to make a change, he made Henry an offer he couldn't refuse, including an opportunity to expand his horizons beyond offshore and work on a variety of projects. And, while Scott didn't



Henry Reeve

have a specific project for Henry when he joined, he knew Henry would bring additional depth to the ACMA team.

Since joining ACMA, Henry has worked on a number of challenging and diversified projects. On one of his first assignments, he worked as part of a JIP team that analyzed how to mitigate roll motions on FPSOs.

Henry's next major project involved the motion control and hydrodynamics of ACMA's NOAA SWATH design, currently under construction at VT Halter. And, during the past year, he has been involved with the ACMA/Mustang Engineering LNG project. Today, he's hard at work on a Chevron project.

What does Henry see as today's most important new technology? "It's all about LNG," says Henry. "Natural gas is our leading alternative to oil. It's much cleaner and ready to go since it doesn't need refining. Our greatest challenge is to improve the process of getting the gas out of the ground, cooling it down to liquid, transporting it and, finally, heating it back up again into gas form – all in a safe environment with a minimum loss of product."

It's the cutting edge of technology and it's exactly where Henry likes to be.