



# Great Lakes Maritime Research Institute

A University of Wisconsin - Superior and University of Minnesota Duluth Consortium

Co-Directors:  
Richard D. Stewart  
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## October 2013

## Quarterly Update

(July - September 2013)

### GLMRI Hosts Annual Advisory Board Meeting

The GLMRI Annual Advisory Board meeting was held on September 19<sup>th</sup> in conjunction with the High Horsepower Summit and the Society of Naval Architects and Marine Engineers Great Lakes and Rivers Section Fall meeting, in Chicago, Illinois. In spite of all of the weather-related airport issues and last minute room changes at the convention center, the meeting came together well. Richard Paris and Leo MacKeller participated from Andrie Shipping representing Lake Carriers' Association. Major Booth with Mike O'Bryan and Marie Strum from the US Army Corps of Engineers Detroit District provided updates on several district projects. Michael Carter, Dan Yuska and Floyd Miras participated from MARAD. Mr. Steve Kemp, the president of the Great Lakes and Rivers Section of the Society of Naval Architects and Marine Engineers discussed the HHP Summit, and the pending SNAME meeting for Friday. Dr. Stewart provided an update on the GLMRI projects and events that we have been involved in over the past year. With his membership on the EPA's Advisory Board for the Great Lake Restoration Initiative (GLRI), he also took away several ideas for GLRI consideration.

### Ship Operations Cooperative Program (SOCP) developing curriculum for Maritime Schools

In July, the Maritime Institute of Training and Advanced Graduate Studies (MITAGS) in Linthicum, MD hosted the "National Maritime Curriculum Development Workshop 2013" to bring together the team of experts to update the maritime course modules to include the latest industry content and the cross referencing aspects to the DOE Common Core Standards (CCS). As a side trip the participants toured the Marine Engineers' Beneficial Association (MEBA) Calhoon School of Marine Engineering in Easton, MD receiving informative presentations on the school's history, background and current programs along with tours of the campus facilities -- Diesel engines, machining, welding, and refrigeration laboratories. GLMRI is working with SOCP to facilitate this education initiative.

### GLMRI Advisory Board Member Retires

Mr. Adolph Ojard, the president of the American Great Lakes Ports Association and the Executive Director of the Duluth Seaway Port Authority retired at the end of September. Mr. Ojard was intricate in the stand-up of GLMRI in 2004, and a supportive member of the Institute and its projects. Congratulations Adolph, and enjoy the next chapter of your life.



Thank you for your many years of support!

### GLMRI Presence at the High Horsepower Summit

[www.hhpsummit.com](http://www.hhpsummit.com)



GLMRI was involved in the High Horsepower (HHP) Summit from 17-19 September in Chicago, IL. GLMRI was included as an endorsing organization for the event. On Wednesday morning of the Summit, Capt. Randolph Helland, USCG retired and GLMRI Regulatory Consultant presented his findings on regulatory issues impacting the use of LNG as a maritime fuel based off of his initial work on the Great Lakes, and subsequent analysis for the Ohio River.

On Thursday morning, Carol Wolosz moderated the marine panel of speakers discussing case studies on recent marine projects. Speakers included Mr. Roy Bleiberg, Director of Engineering for ABS Americas, Mr. John Hatley, Americas Vice President of Ship Power for Wartsila North America, Mr. Jan Hagen Andersen, Principal Engineer for Det Norske Veritas and Dr. Paul Blomerus, Senior Director of High Horsepower for Westport. (Photo below) Carol provided an overview of GLMRI and a brief summary of the LNG project progress and outcomes.

Also at HHP, Mr. Steve Kemp, GLMRI Advisory Board member representing the Society of Naval Architects and Marine Engineers (SNAME), moderated a panel on Tuesday that addressed natural gas engine technologies.





### **SNAME Section Meeting Provides Venue for GLMRI Research Projects**

At the SNAME Great Lakes and Great Rivers Section meeting held at the Hyatt Regency-McCormick Place in Chicago on September 20<sup>th</sup>, GLMRI speakers were included as part of the agenda. Dr. Donn Branstrator, Biology Professor from the University of Minnesota Duluth, provided a report on the ballast tank sediment study that was funded by Lake Carriers' Association. Dr. Richard Stewart, GLMRI Co-Director presented an update of GLMRI projects and the GLMRI LNG study. GLMRI co-sponsored the meeting and networking reception.

Other speakers included Mr. Al Horsmon presenting on composite materials for boat designs and the marine industry, and Jerry West and Rich Kulaga from EMD discussing their two-cycle engine conversions to dual fuel diesel/LNG. Since the meeting was held in conjunction with the HHP Summit, several participants from HHP extended their stay to attend the SNAME meeting. Mr. Kevin Markey from General Physics Corporation provided comments and clarifications on LNG use. Mr. Alexander Harsema-Mensonides from Marine Service GMBH, in Hamburg, Germany, provided comments on maritime conversions and Mr. Leif Gross, Caterpillar Marine Power Systems Manager, spoke on new natural gas engine technologies being developed by Caterpillar. A highlight of the meeting was a tour of the EMD locomotive engine plant in LaGrange, IL. Students from the University of Michigan attended (photo below). Mr. Steve Kemp, SNAME Section president and GLMRI Advisory Board member did a great job at pulling together an interesting venue.



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### **Key Outreach, Events, Presentation, and Meetings**

- Dr. Stewart, Ms. Wolosz, Dr. Mokashi, and Ms. Roemhildt met with Twin Ports' economic development agencies and other interested parties in the working group to continue the discussions on siting a liquefaction plant in the Twin Ports. Superior, WI. 9 Jul.
- Dr. Stewart and Ms. Wolosz met with Mr. Fisher, Executive Director of the American Great Lakes Ports Association, to discuss the LNG meeting from May, and the progress in moving forward. Washington, D.C. 21 Jul.
- Dr. Stewart and Ms. Wolosz met with USCG personnel in Washington: Mr. Ken Smith, Mr. Mark Prescott, Mr. Tim Myers, Commander Rob Smith, and Commander Ryan Allain to discuss GLMRI on-going projects. Washington, D.C. 22 Jul.
- Dr. Stewart and Ms. Wolosz met with Mr. Carter, Mr. Quinn, and Administrator Jaenichen at MARAD. GLMRI provided an update to MARAD on GLMRI on-going projects. Washington, D.C. 22 Jul.
- Dr. Stewart and Ms. Wolosz met with Mr. Gary Magnuson, the NOAA representative to the Committee on Marine Transportation's (CMTS) Coordinating Committee. Washington, D.C. 22 Jul.
- Dr. Stewart, Ms. Wolosz, Dr. Mokashi, and Ms. Roemhildt met with Twin Ports economic development agencies continuing to pursue siting options for a liquefaction plant. Superior, WI. 13 Aug.
- Ms. Wolosz and Dr. Mokashi attended a symposium on the use of propane in the Duluth/Superior area and met with the speakers. Ms. Wolosz is pursuing the information and curriculum that is being developed for First Responder Training. 13 Aug.
- Dr. Stewart boarded the *M/V Roger Blough* from Duluth, MN to Conneaut, OH and return. 20-26 Aug.
- Ms. Wolosz attended the Harbor Technical Advisory Committee meeting. Superior, WI. 4 Sep.
- Chicago meetings. 17-20 Sep. See separate articles.
- Dr. Stewart met with the St. Lawrence Seaway Development Corporation's new Administrator Betty Sutton and Deputy Administrator Craig Middlebrook during a roundtable discussion held by the Duluth Seaway Port Authority. Duluth, MN. 18 Sep.

#### **Mark Your Calendars—Plan to Attend**

- Ship Operations Cooperative Program Fall Meeting**  
 November 6-7, 2013  
 Maritime Inst. of Technology and Graduate Studies (MITAGS), Linthicum, MD  
 (Register at [www.socp.us](http://www.socp.us))
- HWY H2O Conference, Toronto, Canada. November 13-14, 2013**
- Transportation Research Board, Washington, D.C.**  
 January 12-16, 2014
- Great Lakes Waterways Conference, Cleveland, OH**  
 February 4-6, 2014
- Great Lakes & Great Rivers Section, Society of Naval Architects and Marine Engineers Meeting, Cleveland, OH February 6-7, 2014**

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