Co-Directors: Richard D. Stewart James P. Riehl

January 2014

Great Lakes MaritimeResearch Institute

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

Quarterly Update

(October – December 2013)

LNG Planning Efforts Continue

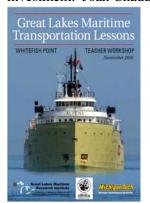
Since the GLMRI meeting in May, a working group has been meeting to assist several interested developers on siting a natural gas liquefaction plant in the Twin Ports. Dr. Stewart, Ms. Wolosz, Dr. Mokashi and Ms. Roemhildt have been participating in the working group with local economic development agencies, energy companies and Port representatives. The group is focusing on moving forward with the planning to site a liquefaction plant in the Twin Ports region. Since the GLMRI meeting in May, the working group has been meeting monthly, and identifying topics that need to be addressed as the projects develop. GLMRI has continued to address topics to extend the education and outreach for developers, city planners and policy makers, along with potential users. A University of Wisconsin-Superior (UW-S) student team (Ms. Hiroko Tada and Ms. Julie Haeder), under the leadership of Dr. Stewart, prepared a report that evaluated a potential marine fueling terminal for the Twin Ports. Dr. Amit Mokashi, Assistant Professor at UW-S, has initiated a study on innovation in transportation where he is doing a cross modal comparison of the case of adoption of LNG as an alternate fuel. He plans to survey transportation stakeholders in the Great Lakes region to reveal the dominant influencers that could facilitate the adoption of LNG.

Great Lakes Maritime Task Force Endorses GLMRI

The Great Lakes Maritime Task Force (GLMTF) voted to continue to endorse GLMRI as one of their top priorities. GLMTF has submitted letters to the senators and congressional representatives from the eight Great Lakes' states, the DOT Secretary, MARAD and St. Lawrence Seaway Development Corporation Administrators, and the Federal Maritime Commission requesting continued financial support for GLMRI. Since its founding in 1992, the GLMTF has grown to be the largest labor/management coalition ever to promote shipping on the Great Lakes and St. Lawrence Seaway. GLMRI is grateful for their support and backing.

Maritime Education: The Investment That Keeps Paying Dividends

From 2005-2012, GLMRI has provided funding to support maritime education throughout the Great Lakes region. The region continues to benefit from this investment. Joan Chadde, the Maritime Education



program coordinator from Michigan Technological University, a GLMRI affiliate university, recently compiled the statistics on the Maritime Education Workshop.

Approximately 150 teachers and educators have participated, developing over 180 lesson plans. (These are publicly accessible through the GLMRI web site.) 51 education "chests"

have been distributed in 6 of the Great Lake states and Ontario, Canada. The education chests are available at public locations that are accessible for schools, teachers,

and other educators to check out to use in classrooms and workshops. Lake Carriers Association and other maritime groups have provided materials to support the education



venues. An informed teacher reaches hundreds of students. Maritime education and advocacy is key not only for teachers and students, but also the public and policy makers, to better understand the benefits of maritime shipping and commerce for the Great Lakes region. (www.glmri.org/resources/)

The GLMRI Annual Report will be coming out in February. Please send address updates/changes to jhartwic@d.umn.edu

GLMRI Co-Director Recognized for Service

Dr. Richard Stewart, GLMRI Co-Director, was recognized for excellence in service by the University of Wisconsin-Superior on Veterans' Day for his distinguished career as a U.S. Merchant Marine Mariner

and a Naval Officer. Dr. Stewart began his service as a Mess man and Ordinary Seaman in 1967-68. He then entered the U.S. Merchant Marine Academy, graduating in 1973. Upon graduation, he was commissioned in the U.S. Naval Reserve and served for 30 years reaching the rank of Captain, USNR. In the Merchant Marine he



advanced to the position of Master of Vessels, in which role he served from 1980 to 1986. He still sails aboard vessels and holds a current Unlimited Ocean Master's License. Dr. Stewart was a faculty member of the U.S. Merchant Marine Academy, serving as head of the Department of Marine Transportation from 1989 to 1996. Dr. Stewart was awarded the Merchant Marine Vietnam Service Medal for service in the Vietnam war zone in 1968, 1970 and 1971. Chancellor Renee Wachter presented the award at a public ceremony on the UW-S campus held on November 11, 2013.

Papers and Publications

- Dr. Stewart and Ms. Wolosz prepared and submitted a paper to the International Research Conference on Short Sea Shipping, titled *Development of the Adoption of LNG as a Fuel for Shipping on the Great Lakes*
- Dr. Stewart submitted a paper about the conversion of Great Lakes vessel lighting from incandescent to CFL bulbs; "Lighting a Green Ship" for spring publication in the Green Marine magazine.
- GLMRI has submitted two topics for consideration at the public meeting hosted by the Maritime Administration at the National Maritime Strategy Symposium: Cargo Opportunities and Sealift Capacity meetings held on 14-16 Jan 2014.
 - 1.) Dedicated funding to support Maritime Research
 - 2.) Vessel Alternative Fuel Research
- Mr. Randolph Helland, consultant to GLMRI, completed the project report and review of current regulatory and policy standards for Liquefied Natural Gas as A Maritime Fuel On the Ohio River. This project report, along with the full GLMRI Phase II report will be posted on the GLMRI web page. (www.glmri.org/research/)

Report Contact: Carol Wolosz GLMRI Executive Director cwolosz@d.umn.edu (218) 726-7446

www.glmri.org

Key Outreach, Events, Presentations, & Meetings

- Ms. Wolosz attended the Great Lakes Maritime Academy's Board of Visitors meetings. Traverse City, MI. 22-23 Oct.
- Dr. Stewart attended the AST&L and Yangtze/Mississippi River Conference. Chicago, IL. 27-29 Oct.
- Ms. Wolosz met with the new administrator of the St. Lawrence Seaway Development Corporation, Ms. Betty Sutton and her staff. Washington, D.C. 5 Nov.
- Ms. Wolosz participated in the USCG facilitated discussion with deep-draft vessel owners/operators, where one of the major discussions was on LNG as a maritime fuel. Linthicum, MD. 5 Nov.
- Ms. Wolosz participated in the Ship Operations Cooperative Program meetings. Linthicum, MD. 6-7 Nov.
- Ms. Wolosz met with Mr. Carter and Mr. Yuska to discuss the LNG project and other GLMRI project updates. Linthicum, MD. 6 Nov.
- Dr. Stewart presented about LNG at the Highway H₂O conference. Toronto, ON. 13-14 Nov.
- Ms. Wolosz met with Rolls Royce representatives Mike Hitt and Jeff Tilbury to discuss on-gong LNG project activities. Duluth, MN. 14 Nov.
- Dr. Stewart attend IANA annual meeting. Houston, TX. 16-20 Nov.
- Dr. Stewart participated as a member in the public meetings of the Great Lakes Advisory Board to the EPA. The Report of the Great Lakes Advisory Board with recommendations for the next Action Plan for implementing the Great Lakes Restoration Initiative was completed on December 2013. The report can be accessed at:

www.glri.us/pdfs/glab-report-20131223.pdf

Mark Your Calendars--Plan to Attend

Great Lakes Waterways Conference, Cleveland, OH February 4-5, 2014

Great Lakes & Great Rivers Section, Society of Naval Architects and Marine Engineers Meeting, Cleveland, OH February 5-6, 2014

The Maritime Academy of Toledo's Spring Events
K-12 Maritime Institute and
V-Step Navigation & RADAR Simulator Dedication Ceremony
Friday, April 11, 2014
Annual Admiral's Ball, Saturday, April 12, 2014

(Renée Marazon at 419-343-1604, rmarazon@maritimeacademy.us)

Ship Operations Cooperative Program Spring Meeting
May 13-14, 2014
Houston, TX

(Register at www.socp.us)



University of Minnesota Duluth

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