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

Great Lakes Maritime Research Institute

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

Quarterly Update

(October - December 2015)

January 2016

GLMRI Research Team Visits New Quebec Ferry

In October 2015, GLMRI team members traveled to Quebec to meet with **Société des traversiers du Québec** (STQ) to learn about their new LNG powered ferry. The STQ is owned by the provincial government of Quebec and operates the provincial ferry services. The agency was founded in 1971, and runs 17 vessels in the Quebec Province with 112,000 crossings carrying 2.1 million vehicles and 5.2 million passengers each year.

In 2009, STQ decided to update their fleet of ferries, and had focused on replacing the 40 year old *N.M. Camille-Marcoux* that operates between Matane and Baie-Comeau and Godbout, in addition to two smaller ferries that cross between Tadoussac and Baie-Sainte-Catherine on the Sauguenay River. Not only did STQ determine that they wanted to look at fuel options, but also updated the vessels for many other environmental improvements. Their new ferry, the *F.A. Gauthier*, was delivered and put into service during the summer of 2015.



Dr. Stewart and Ms. Wolosz met with experts at all levels in the organization to better understand the decisions, training and operations along with "lessons learned" for design, preparation and operations of transitioning to using LNG as a fuel. With this being a new acquisition for Quebec, GLMRI researchers were able to gain the perspective of the issues and challenges that go

along with transitioning to a new system. On October 5, 2015, they met with Ms. Isabelle Beaudoin, the Director for the Security of the Environment and Mr. Louis Guimond-Mongrain,



Director for Maritime Service in their Quebec City office. Ms. Beaudoin is the program manager for the new

ferries and Mr. Guimond-Mongrain is the professional engineer for the renewal programs.

On October 6, 2015 GLMRI researchers were provided an extensive tour of the *F.A Gauthier*

and observed the new ferry in operation. Ms. Greta Bedard, the Director for Environmental Security for STQ, led the team to see every detail of the vessel. The ferry was designed to be a fully "Green" ship, with environmental considerations embedded throughout.



Mark Your Calendars!

Great Lakes Waterways Conference
February 9-10, 2016
and
Society of Naval Architects and Marine
Engineers Meeting
February 10-11, 2016
Key Center Marriott Hotel
Cleveland, Ohio

Of Note:

GLMRI Researcher Selected as Director of Lake Superior Research Institute

The University of Wisconsin-Superior announced Dr. Matt TenEyck was selected as the new Director of the Lake Superior Research

Institute (LSRI), effective January 1, 2016. Matt has served as principal and co-principal investigator on several research projects in the areas of toxicology, environmental science, and invasion ecology including



working on the testing of ballast water treatment systems at the bench scale level. GLMRI provided multi-year funding to support a research project attempting to understand the mechanisms behind aquatic invasions. Dr. TenEyck holds a Ph. D. from the University of Minnesota, a master's degree from the University of Oklahoma, and a bachelor's degree from UW-Superior. Congratulations Matt!

Transportation Research Board (TRB)

Dr. Stewart and LCDR Jud Coleman's paper titled *Liquefied Natural Gas (LNG) Bunkering by Vessel in the Great Lakes: An Analysis of Regulatory and Operational Issues* was selected for presentation at the 2016 Transportation Research Board Annual Meetings. The presentation was part of a panel on Current Research on the Marine Environment: LNG as Marine Fuel. Dr. Stewart was also on a panel titled Port Sustainable Development: Where Rivers Meet Open Waters providing a Great Lakes perspective.

UW-S Open House

An open house was held of the new offices for the University of Wisconsin-Superior's Transportation and Logistics Research Center and GLMRI on October 12, 2015. The Research Center was displaced after a flood in June of 2012 and now has a place to call home. The Research Center can be found in Erlanson Hall along with the Department of Business & Economics, the Small Business Development Center and the Northern Center for Economic Development. The suite of offices consolidates the staff, researchers and faculty into one area along with an area for students to work and tutor, as well as a conference room. Members from the community, university and industry attended the event.



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Key Outreach, Events, Presentations, & Meetings

- Dr. Stewart and Ms. Wolosz met with Ms. Isabelle Beaudoin, the Director for the Security of the Environment and Mr. Louis Guimond-Mongrain, Director for Maritime Service.to discuss their new LNG ferry program and then traveled to Matane, Quebec to tour the ferry and facilities with Ms. Greta Bedard, the Director for Environmental Security. Quebec City and Matane, Quebec. 5-6 Oct.
- Dr. Stewart and Ms. Wolosz met with Mr. David Bolduc, the Executive Director of Green Marine. Quebec City, Quebec. 5 Oct.
- The University of Wisconsin-Superior's
 Transportation and Logistics Center, including
 GLMRI, hosted an open house to showcase their new
 offices on Campus. Superior, WI. 12 Oct.
- Dr. Stewart and Ms. Wolosz were invited guests of CN/Great Lakes Fleet at the annual Duluth Area Chamber of Commerce dinner and meeting at the Duluth Entertainment Convention Center. CN Executive Vice President and Chief Operating Officer, Mr. James Vena, was the keynote speaker for the event. Duluth, MN. 28 Oct.
- Ms. Wolosz attended the 2015 Wisconsin Bio-gas
 Conference, hosted by the Wisconsin State Energy
 Office and met with renewable gas developers and
 researchers from around the Midwest to discuss the
 expansion of digesters for farm and landfill operations
 and potential uses for bio-gas. Appleton, WI. 12 Nov.
- Dr. Stewart participated in the Council of Great Lakes Governors and Premiers Maritime Task Force Advisory Committee meeting. Skokie, IL. 1-2 Dec.
- Ms. Cassie Roemhildt attended the Harbor Technical Advisory Committee meeting. Duluth, MN. 2 Dec.

Survey of Shipping Companies

GLMRI will be initiating a survey in the next few weeks reaching out to Great Lakes and inland rivers shipping company owners/operators. The Institute is seeking information on company intentions for moving to LNG as a marine fuel in the future. Please take a few minutes to complete the survey when you receive the email.

The GLMRI Quarterly Updates will only be sent in paper format by request. If you need to receive a paper copy, please send your address to: CHANSE12@uwsuper.edu, or mail to:

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