

2015 Annual Report

Worldwide Ferry Safety Association

January 4, 2016

**Overview**

The goal of the Worldwide Ferry Safety Association’s (WFSA) has been to identify and disseminate approaches, primarily technology-based, to reduce ferry fatalities. We focus on technology because it is often an impetus for social change. In 2015 we have continued to sponsor our annual vessel design competition, commissioned student research, convened a technology-based conference, and served as a central locus for the dissemination of other organizations’ research. We note that during 2015 more organizations, researchers, and operators have engaged in research efforts and have initiated capital and operational improvements for ferry safety. We have identified a market and potential partners for a project to develop a tablet-based training program.

**Third Annual Student Design Competition for a Safe, Affordable Ferry**

The 2015 design competition was opened to student contestants on August 15. Submissions will be due March 15, 2016. The 2015 competition calls for student teams to design a RoPax ferry to traverse several stops in the Savu Sea area of Indonesia. The Savu Sea stops include Komodo Island (of Komodo dragon fame) and Flores Island, where the skeletons of hobbit-like human populations have been found. Twenty-four teams registered this year, almost double our participation in previous years, and far more teams came from the developing world in absolute numbers and as a percentage of the total than in previous years. More specifically, seven teams registered from Indonesian universities, four from Indian institutions, and three from Bangladesh. Also represented are Canada, Germany, Scotland, Japan, Malaysia, the United States, and Sweden’s World Maritime University. This year’s high degree of participation by students in the developing world will encourage the next generation of maritime professionals in accident-prone nations to seek out safety solutions at home and abroad, helping influence the entire developing world’s ferry safety.

Last year’s competition was initiated on January 1, 2014 and results of the competition were announced in the fall of 2014. Student awardees were invited and subsidized to attend the Ferry Safety and Technology conference in New York in April 2015, where they were honored for their participation.

**Ferry Safety and Technology Conference**

The WFSA’s 2015 Ferry Safety and Technology Conference, the first of its kind, was successful on a number of counts. The conference attracted high-quality speakers with expertise in weather information technology, vessel design, communications, and electronic training. So many industry professionals expressed interest that the event had to be moved to a larger event space within the Alexander Hamilton U.S. Custom House. Students attended from prestigious institutions that included the United States Coast Guard Academy, Bremen University of Applied Sciences, SUNY Maritime College, University of British Columbia, and the Webb Institute. Industry sponsors contributed a total of $20,455 (with $3,000 remaining on account with the New York City Economic Development Corporation). The hands-on demonstrations and harbor tours that followed the conference’s main programming were well received, as were the evening reception at the Custom House and ancillary materials including the conference website, giveaways, and speaker gifts.

**Ongoing Research**

***Major ferry accidents analysis****.*We submitted a paper to the peer-reviewed Journal of Public Transportation that focuses on worldwide ferry fatality statistics and draws conclusions from 14 years of this data compiled by the WFSA. The paper, co-authored by Abigail Golden and Roberta Weisbrod, represents the most comprehensive collection to date of long-term data on ferry accidents around the world, and has already been used by Interferry and the International Maritime Rescue Federation to support their own projects.

***Indonesia’s ferry system****.* We accepted a student intern from John Jay College, Matthew Pascual, to prepare a paper about the Indonesian ferry system in the context of the country’s new maritime policy to extend itself as a regional maritime power while using interisland maritime transport to integrate the nation socially and to enhance trade and economic development. That paper is currently anticipating review by an Indonesian maritime government official, Aleik Nurwahyudy, who is also collaborating with the WFSA on the third annual design competition.

***The Philippines’ ferry system****.* WFSA research associate Abigail Golden prepared a report on the Philippines ferry system and safety regime. The report is available on the WFSA website.

***Insurance in the developing world****.* We prepared a proposal focusing on the maritime insurance regimes of Bangladesh, Indonesia and the Philippines to explore the idea that, in the absence of a robust regulatory regime, insurance companies could encourage their ferry owner clients to improve operations. We hope to take this concept to the next step and partner with an insurance company to test out the idea in a developing nation.

***Incident reporting****.* We prepared a paper surveying the state of incident reporting throughout the International Maritime Organization’s member states. We found that only a small fraction of the world’s ferry accidents were voluntarily reported to the IMO’s Global Integrated Shipping Information System, and hypothesize that mandatory reporting would improve the frequency and quality of nations’ accident investigations, which could help prevent future accidents. In the likely absence of mandatory reporting by the nations, publicizing the lack of reporting could act as a spur.

**Publications**

 *(mt)*, the marine technology magazine published by the Society of Naval Architects and Marine Engineers, devoted an entire issues to ferries, co-edited by Roberta Weisbrod. For the issue, titled “The Changing Ferry: Accelerating Innovation,” Roberta Weisbrod drafted the editorial “Primed for Growth” and authored an article, “The Future Ferry.” Abigail Golden co-authored a sidebar, “Understanding Accidents.” Several other articles focused on safety or strongly referenced it.

**WFSA as a Clearinghouse for Information.**

Throughout this year we have sought out other researchers working on issues of ferry safety and have developed our reputation as aclearinghouse for such research:

1) Aleik Nurwahyudy, Marine Safety Investigator the National Transportation Safety Committee, Government of Indonesia. Aleik’s Master’s thesis for World Maritime University is of international importance as the most in-depth analysis of the causes of fatalities and vessel loss associated with fires on truck ferries (like the Norman Atlantic off of Italy). In particular he used an advanced analytic program that specifies subsets of aspects of human error. The power point Aleik prepared is posted on the WFSA website.

(2) Jaya Pradesh, a widely published maritime journalist of Indonesian background living in Singapore, has issued an informed call for technology to control overcrowding. He contacted us for researching an article he wrote for BC Shipping News. This was followed up with a series of skype conversations with him. Subsequently it was learned that Mr. Pradesh had been named the SeaTrade Maritime Journalist of the year award. The article is posted on the WFSA website.

(3) Abdul Rahman of Terengganu University in Malaysia has proposed a technology, based on elevator controls, which would provide alerts for overloaded vessels. The paper is posted on WFSA website.

(4) Major Muhammad Rabiul Islam, with the Bangladesh Military Institute of Science and Technology, has analyzed ferry accidents in Bangladesh and suggests a targeted approach to curbing accidents. The paper is posted on the WFSA website.

**Worldwide Professional Outreach**

***The World Health Organization*** **(WHO)** asked WFSA to submit a brief article for its Guidance Manual for Prevention of Drowning on strategies to achieve ferry safety. Roberta Weisbrod and Len Roueche will work on the paper with input from the International Marine Rescue Federation.

***The Passenger Vessel Association* (PVA),** an association of North American ferry owners, operators, and vendors, asked WFSA founder Roberta Weisbrod to make a presentation at its annual meeting in Crystal City, Virginia, in January 2016.

***The Transportation Research Board (TRB)*** For its 2016 Annual Meeting, the TRB Ferry Committee asked Roberta Weisbrod to plan, convene, and preside over a session on Ferry Safety and LNG for the Annual Meeting in January 2016.

At the TRB 2015 Annual Meeting, Roberta Weisbrod and Abigail Golden presented the findings of the major ferry accidents database (described above) to a maritime safety workshop sponsored by the Maritime Safety Committee.

***International Maritime Organization (IMO).*** Roberta Weisbrod was asked to speak in Manila in April 2015 at the IMO conference on domestic ferry safety. Abigail Golden prepared and delivered the presentation.

***International Maritime Research Federation (IMRF).***  Roberta Weisbrod was asked to speak at the IMRF conference in Bremen in collaboration with an IMRF staff member who had used the WFSA’s ferry accident data to explore search and rescue efforts in the developing world. Abigail Golden prepared and delivered the presentation.

***Mobile device-based crew training.*** We are working on solidifying connections between a maritime training company, a digitization company(for conversion to mobile devices), a growing private sector ferry company in a developing nation, and a nascent ferry company in another developing nation. When these connections are forged, we will continue our project of developing a training program to be accessible via mobile device.