

## Worldwide Ferry Safety Association 2023

### Accomplishments & Follow up Plans

**Ferry Safety and Technology conference.** We convened the Ferry Safety and Technology Conference in Brooklyn, our first conference since the start of Covid (during which time we had convened several webinars <https://www.youtube.com/@ferrysafety8068/playlists>). The conference had some new features – a session on maintenance, the secret sauce for safety and profitability, with illuminating presentations from the operators; and a session on electric ferries by naval architects, technology facilitators, and operators. Electric ferries were also the subject of the WFSA 10<sup>th</sup> annual international student design competition, this one for the Pasig River of Manila. In addition to providing monetary awards to the award-winning student teams, six of the student awardees were able to attend the conference, and present their designs, thanks to a TK Foundation grant. Ship and Boat International reported on the results of the competition [https://ferrysafety.org/documents/SBI\\_Jul-Aug%202023\\_30+31+32+33\\_v2.pdf](https://ferrysafety.org/documents/SBI_Jul-Aug%202023_30+31+32+33_v2.pdf)

On Day 2 there was a Workshop at the Staten Island Ferry HQ in Whitehall, which featured candid discussion of practical issues by John Garvey the CEO of the Staten Island Ferry. There was also virtual presentation on 3D printed boats by the University of Maine lab that initiated them. See [https://ferrysafety.org/documents/SBI\\_Sep-Oct%202023\\_44+45+46.pdf](https://ferrysafety.org/documents/SBI_Sep-Oct%202023_44+45+46.pdf)). Board members Jim DeSimone, John Waterhouse, Mary Ann Pastrana, and Nurur Rahman played key roles in the conference, which was also attended by Daryl Attwood, LRF. Con Edison was a new sponsor to the conference. Conference journal is attached.

Commander Stacy Weist presented the US Coast Guard Captain of the Port of NY/NJ Zenia Merchant's award to the Worldwide Ferry Safety Association, in the form of a Statue of Liberty engraved with the exhortation, "Forward with People, Forward with the Mission, Forward with Partnerships!"

### **The international student design competition for a RePax ferry for the Niger River in Nigeria.**

The specifications are for a RoPax ferry to transport people and freight up and down the Niger River in an area centered on Onitsha, an important trading city. Recently there have been a large number of ferry accidents and fatalities on the Niger and Benue Rivers in contrast to Lagos. Student teams from Africa, Asia, Europe and North America has registered so far.

### **Advancing maritime weather technology to blanket the ocean with automated weather stations (AWS)**

- WFSA spoke at the United States' highest level maritime conference – the CMA – about the need for AWS connected to AIS.
- WFSA received a second research and outreach grant from Lloyd's Register Foundation, directed to improving maritime weather detection. (See Notice in Ship and Boat International <https://ferrysafety.org/documents/MediaAdvisory--LRFWFSAwithlogos.pdf>)

Partners are Aleik Nurwahudy, ITS Surabaya and KNKT; Bayu Edo Pratama, Brest University and BMKG; and Dr. Catherine Lawson, University at Albany.

- **WFSA and Indonesian partners convened a Maritime Safety and Weather Technology conference in Surabaya**, thanks to the second Lloyd's Register Foundation grant. As a result of that grant, we were able to continue support installing Automated Weather Stations on vessels in Indonesia, and pay for the travel of the key practitioner in the arena of AWS + AIS, Dr. Greg Johnson, who gave a workshop on the technology. Board members Nurur Rahman and Mary Ann Pastrana had key roles in the conference; Mary Ann gave a sterling summary which was converted into a press release (Conference journal attached).
- Also at the conference, Dr. Saut Gurning's presentation about the uncertainty of the length of time of closing the Bali Strait in the face of hazardous weather ---too long a closing causes huge traffic jams -- highlights a safety, environmental, profitability, and quality of life problem -- susceptible to solution by use of in situ weather technology. Both Dr. Gurning and the Indonesia WFSA team have developed research approaches that are complementary.
- **Access to new maritime weather technology.** The Spotter is a basketball-sized floating weather buoy that if modified to transmit via VHF could supplement and extend the capabilities of vessel-based AWS. WFSA has long sought access to the Sofar-Ocean Spotter and in December WFSA was invited to compete to obtain a few and with our LRF partners submitted an application to work on the Bali Strait problem.

**Exhortation to the US Coast Guard to mandate locational automated weather stations on vessels** for mariner safety and the global good. Relating to our goal to make every vessel required to have the locational device AIS be connected to onboard AWS, so that nearby vessels will be informed of the impending weather and the information will also feed the global weather models – we wrote a detailed letter to the Commandant of the Coast Guard (who had also been the Captain of the Port on NY/NJ). They replied that they shared the same goal and suggested steps that could help facilitate the goal, including making a formal request for rulemaking. We are working on this significant undertaking.

#### **Other activities**

**World Bank.** The WFSA received, and completed, a World Bank consultant contract to review a report on the Inland Waterway System of West Bengal, specifically the Hoougly River, of Kolkata in the West Bengal area.

#### **Transportation Research Board**

RW became a member of the TRB Marine Safety and Human Factors committee and took on the role of Research Needs Coordinator, proposing two research needs statements (see attached). One is to evaluate methods to improve in situ weather detection and communication; the other is on the issue of electric vehicles on vessels. Lithium-ion battery failure has a low frequency but very high consequence especially in ships at sea. Most safety efforts are directed toward

the nearly impossible task of fighting the fires (fast moving, toxic, explosive, chain reaction). We call for research to develop simple effective diagnostics about battery technology – using existing technology. (See attached).

## **NEXT STEPS**

**Ferry Safety and Technology Conference in Lagos.** Lagos, in the midst of dynamic growth of its ferry system, is the place to be. The recently re-elected Governor of the State of Lagos energized the ferry system with new landings and new ferries and promises to expand the system to decongest the city. He is also planning for electric ferries. In recognition of the Lagos State's efforts the Lagos State government received 410 million Euro through COP28. Unfortunately, other States in Nigeria have poor ferry safety records. The WFSA design competition addresses the lack of quality ferries with a request for designs for a passenger and vehicle ferry to traverse the Niger River north and south of Onitsha. Navy Lieutenant David Okafor who developed the specifications is also keen to have the conference – and secured the biggest cost item for a conference – the venue, which will be at the Naval Dockyards near the southern shoreline of Lagos. The plan is to have the conference in early November (after the Interferry Conference in Marrakesh). WFSA submitted a request for sponsorship to the Lloyd's Register Foundation.

Interferry Ferry Safety Committee – conference in Tanzania. WFSA Board members Waterhouse, Weisbrod, Pastrana and Rahman, members of the Committee, have participated in the planning of the conference to be held in Tanzania in April. Pastrana and hopefully Rahman will attend the conference.

**Maritime Weather Technology.** There has been an efflorescence of new maritime technologies – virtually all on the data analysis side and far fewer involved in the data acquisition side (other than AWS + AIS and the Spotter). Because of the maritime safety issues, WFSA is planning a review and or showcase about the technologies.