

# Education, Workforce Development & Training for Automation, Digital Leadership

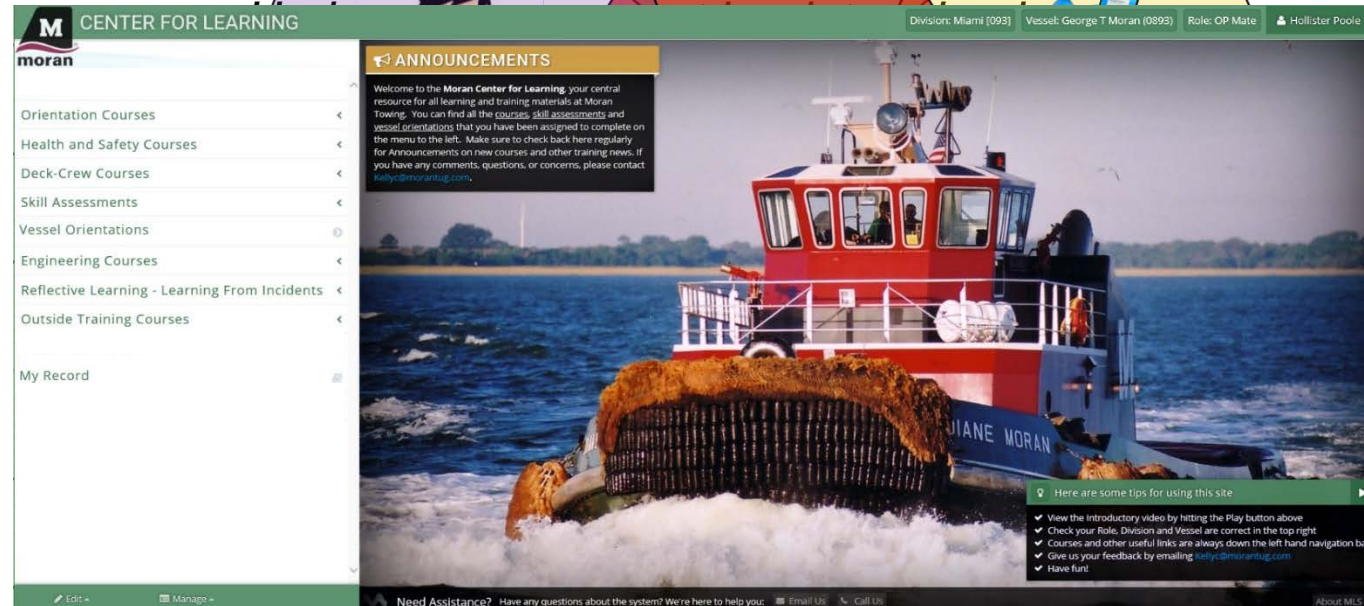
## Moran Towing Corporation



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Maritime Education, Training, Research & Innovation (METRI) Virtual Summit  
November 9, 2020

- Moran's Learning Approach
- Blended Learning Programs
- Technology – Moving us Towards the Future
- Education, Training, and Skills Necessary for the Future
- Discussion

- Professional Competence
- Blended Learning
- The Moran Center for Learning - The Blended Learning System
- Simple, Sustainable, Scalable, SMART
- Culture of Safety, Honesty and Customer Service

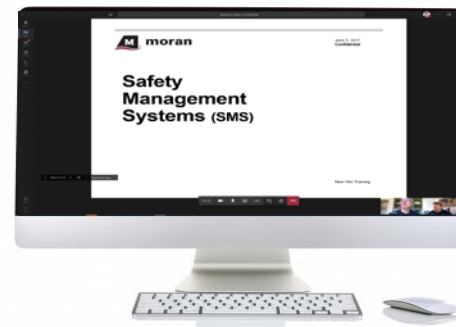
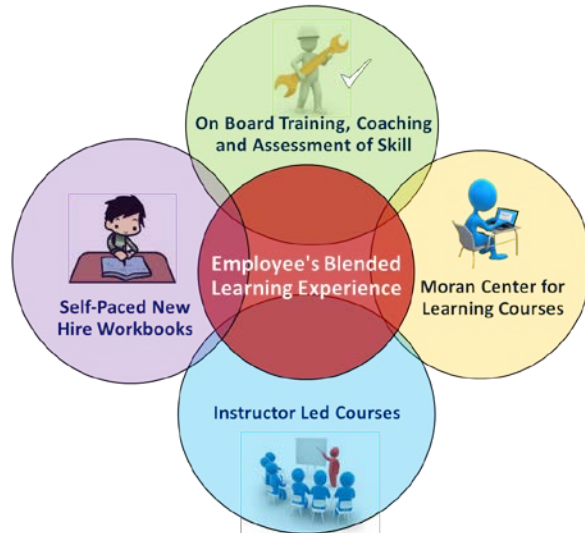


be assessed



# Blended Learning Programs

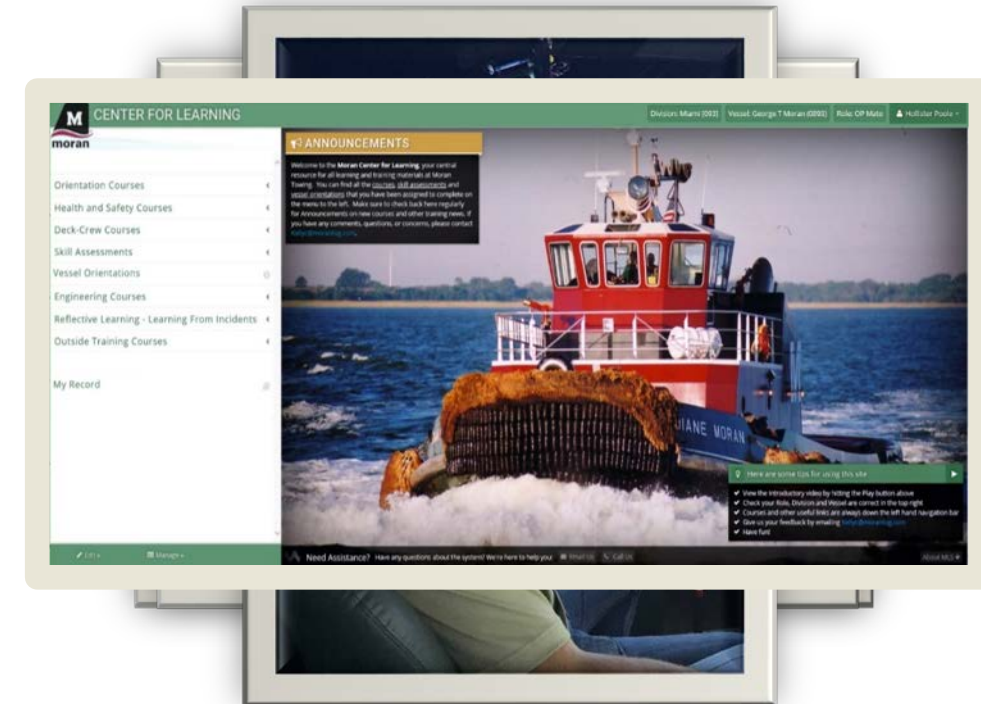
- New-Hire
- Operator (Mates, Captains)
- Navigational Skill Assessment Program
- Engineer
- Person-in-Charge of Fuel Transfer



# Technology - Moving Us Towards the Future



- Moran Center for Learning
- Simulation Centers for NSAP and Boat Handling Training
- Internet of Things (IoT) and Data Analysis
- Online Meeting Software (Microsoft Teams, Zoom, Etc.)



**And then came COVID-19...**

# Technology – and the “New Normal”?

- Returning Employees to Work - vs- Work from Home?
- Risk of Travel for Live Training -vs- Risk of Not Conducting Live Training?
  - Live Training → Virtual Live Training
- Simulation Centers – can we do this differently and still effectively?
- How do we continue to express/teach our Culture to our employees remotely?
- What else can we do with technology to effectively enhance our business?
- What will the new normal look like?
  - When do we return to “live” in-person training?
  - What elements will we continue to do virtually?



## **Shoreside:**

- Supply Chain Logistics
- Internet of Things (IoT) - including Integration, Data Analysis and Decision Making

## **Afloat:**

- The Basics of IoT
- Engineering Technology
- Tugboat Deck Operations
- Small Boat Handling Experience
- Integrated Electronics Training and Wheelhouse (Bridge) Skill Assessment

## **Both Shoreside and Afloat Personnel:**

- Cyber Security
- Automation – Remote Operation
- Risk Assessment, Risk Analysis and Decision Making
- Safety Management Systems and Auditing
- Behavior Based Safety
- Interpersonal Relationships, Leadership, Team-work, and Coaching in a New-Virtual World



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## For Discussion:

- What other skills/areas do the people in attendance feel will be critical for the next generation of our maritime work force to safely operate our vessels?
- Can the ideas we mention and discuss later be considered for research areas, course offerings, certificate programs, or even perhaps minor or major degrees at your schools?
- How do we continue to make advances in Simulation and Simulation Training Centers to meet the realism necessary to train and assess our mariners in the most realistic ways possible?
- Are we reaching a point where simulation can be done remotely? Is the technology there and cost effective enough where port facilities can have their own simulators and assessors can log in “virtually” to conduct training and assessment (with cameras and audio feed)?
- What can we do to ensure technology is implemented in a way that ensures our vessels will operate more safely? And how can we better integrate the Operators (Mate/Captain) or Engineers in the design and testing process?

# Discussion



## **Summary:**

Moran has survived and prospered by continuously reinventing itself for over 160 years. Starting off in 1860 as a tugboat company, we have grown from those roots to become a leading provider of towing services, bulk marine transportation, LNG support operations, and environmental recovery services. While economies, cultures, markets, and technology will always continue to evolve, our steadfast commitment to partnering with our employees, customers, and academia to respond to our customers marine transportation needs has enabled us to stay the course year after year.

This presentation offers a look at Moran's approach to Learning and Employee Development and how technology plays a key role. It discusses the impact of COVID-19 and how technology has helped us maintain our continuity of operations. It provides our thoughts on educational areas and skills that we see as needed for the next generation of mariners and concludes with questions for further discussion on how maritime training schools/organizations and industry can work together to better prepare mariners to be able to succeed in an industry that will continue to see advances in technology and automation in the future.