

**Course Title: Maritime Cyber Security Leadership**

**Abstract:** This presentation will focus on the role of the maritime industry to enhance our mariners' knowledge in cybersecurity and how this can help them in successfully commanding maritime vessels and leading maritime organizations. One of the key elements reviewed is Cyber Risk Management (CRM) and how every regulatory and scientific agency has it interwoven into their core mission and objectives. We will discuss specific IMO, USCG and BIMCO rules, policies and guidelines that are in place and what ramifications they will have on the maritime sector in the short and long terms. We will enumerate specific cyber threats in our current maritime industry and discuss safeguards deployed to thwart these potential intrusions. We will conclude with a review of leadership preparedness and what steps senior leadership can take to create a more secure and stable infrastructure from both the land and sea based areas.

**Organization:** USMMA, Kings Point, NY

**Website:** [www.usmma.edu](http://www.usmma.edu)

**Instructor(s):** Captain Emil A. Muccin, USMS



Emil Muccin is an Associate Professor of Nautical Science in the Marine Transportation Department at the United States Merchant Marine Academy. He previously was the Marine Transportation Department STCW Coordinator. Additionally, he is the Faculty Advisor to the Museum Club as well as Cyber Defense and Propeller Clubs. Emil is currently the President of the Friends of the American Merchant Marine Museum.

Emil graduated from the USMMA with a BS in Nautical Science and from Pace University with an MBA in Information Systems.

He sailed for many years as the Master of paddle wheelers on the Hudson River onboard the River Rose for the Hudson Riverboat Company and River Queen for Montrose Transportation. Additionally, he possesses a Master of Towing Vessels as well as First Class Pilotage for the entire Great Lakes.

At the USMMA, he was the former Coordinator for the Academic Leadership Program and developed both courses of instruction- Principles of Leadership and Leadership and Management. Both courses successfully completed together provide Midshipmen with the Leadership endorsement for their senior license.

Emil is the Lead for the Cyber Security Program and has instructed both Computer Networking, Applications and Architecture as well as the Cyber Defense Capstone Course that participated in the NSA NCX Exercise.

On the Nautical Science side, he instructs both Terrestrial Navigation 1 and 2, Advanced Firefighting, Basic Firefighting and has assisted in RADAR/ARPA, ECDIS and Electronic Navigation 1.

On the Business side he is the Lead for Business of Transportation and has edited 6 chapters in the Business of Shipping textbook. Emil also was an instructor for Business Sea Project evaluations.

**Session POC:** Capt. Emil Muccin, [muccine@usmma.edu](mailto:muccine@usmma.edu), 914-582-6919

**NDTA Transportation Academy Coordinator:** Irvin "Irv" Varkonyi, NDTA HQ  
[ivarkonyi@ndtahq.com](mailto:ivarkonyi@ndtahq.com) // 703-863-9686 // Skype – Ivarkonyi // Fairfax, VA

**DoD Transportation Academy Coordinator:** Tim Ringdahl, USTRANSCOM  
[timothy.p.ringdahl.ctr@mail.mil](mailto:timothy.p.ringdahl.ctr@mail.mil) // 618-220-4126 // Scott AFB, IL