



Maine Maritime Academy

Adapting to meet a changing maritime industry.

by MR. JOHN BARLOW, PH.D.
*Vice President of Academic Affairs and Provost
Maine Maritime Academy*

The last two decades have presented significant challenges and changes in maritime education at U.S. maritime academies. Maine Maritime Academy (MMA) is an example of an institution rising to meet the changes and challenges of an evolving world economy, increased environmental awareness, and internationalization of the maritime industries.

A Brief History

The Maine Nautical Training School was established in 1941 by the state of Maine in the village of Castine, thanks to the efforts of Mr. Ralph A. Leavitt, a state legislator and first president of the school's board of directors. In 1942, Maine Nautical Training School was officially designated Maine Maritime Academy with the single mission—born of wartime needs—to produce U.S. Naval Reserve and licensed merchant marine officers.

Maine Maritime Academy maintained a strictly maritime shipping industry focus for the first 45 years of its existence. As the U.S. Merchant Marine was downsized and many of the vessels put under flags of convenience, job placement at sea and enrollment began to diminish. Engineering graduates were always in demand ashore, but deck graduates found shoreside job placements less available.

A number of programs were established during the 1970s to prepare students for shoreside opportunities. MMA offered minors in shipyard operations, marine science, naval architecture, and other disciplines. In the 1970s, most students primarily focused on a license and developing a career at sea, but with a bachelor's degree



from MMA, they were able to develop shoreside careers if shipping billets were not available.

Today, Maine Maritime Academy continues to evolve to meet the needs of 21st-century students. Among its principal goals, MMA focuses on marine-related programs and prepares graduates for lifelong learning and leadership in a global economy while striving for professional placement for every graduate.

Accreditation

The academy's first accreditation was institutional accreditation by the New England Association of Schools and Colleges (NEASC). Institutional accreditation focuses on the entire institution as opposed to individual programs. To meet the requirements of NEASC, the curriculum was expanded in the area of general education components, and more courses were added in the arts, science, social studies, and mathematics.

Toward the end of the 1970s, Maine Maritime Academy applications and enrollment fluctuated dramatically with the ups and downs of the maritime job market. With rising staff and faculty concerns that the academy might not survive without higher enrollment, they began to put significant changes into place to assure stability and continuation of the merchant marine programs.

The appointment of Mr. Kenneth Curtis, a high-profile alumnus with experience as a seafarer, attorney, and leader in state, national, and international arenas, as president breathed new life into the academy's academic and student training programs. The regiment was restructured from a quasi-military organization into a leadership lab with clearly established goals for the student experience. Many of the obstacles that students had previously endured due to tradition were abandoned and leadership theory, practice, and guided



Castine Harbor is a busy place on a September afternoon as the academy's fleet of small vessels, including the tug *Pentagoet* and the schooner *Bowdoin*, are used for training. All photos courtesy of Maine Maritime Academy.



hands-on application were instituted in support of the main mission of the regimental structure. Curtis was outspoken in his directive "If it does not make sense, don't do it."

Current Programs

Under the leadership of President Curtis, the academy began to diversify its academic programs to provide for a more stable enrollment. This translated to the addition of programs that would not directly correlate with the U.S.-flag blue water fleet.

Over a 10-year period, MMA initiated various degree programs that did not lead to a USCG unlimited license, including:

- yacht design,
- marina management,
- small vessel operations,
- international business and logistics,
- ocean studies,
- marine biology,
- marine sciences,
- power engineering technology,
- power engineering operations,
- marine systems engineering.

The degree programs that do not lead to the unlimited USCG licenses do not require student participation in the regiment, though the program welcomes all undergraduate students.

On Campus

As a result, a special feature of student life at Maine Maritime Academy is the mix of two student lifestyles intermingled on one campus. The uniformed Regiment of Midshipmen follow a student-run leadership and management structure based on military traditions, courtesies, and terminology. Regimented

students also have additional training requirements that include shipboard maintenance, watchstanding, and professional development classes but incur no military obligation following graduation. Non-regimental students, referred to as "independents," follow a traditional college lifestyle. Students easily co-mingle in all

Regimental and independent students share a happy commencement.



While MMA has more than 200 commuting students, many seniors still opt to live in the recently renovated Curtis Hall residence. Senior-level students may also opt for apartment-style living on campus in the student commons.

areas of campus, from classes and campus residency to student government and athletics.

All new students participate in a two-and-a-half-day orientation program. Following this combined orientation, regimental and independent students diverge to enter separate three-day programs: the regimental preparatory program for those entering the Regiment of Midshipmen, or a public service program for independent students. Regimental students continue their

Maine Maritime Academy also has a strong tradition of support for the armed services of the United States. MMA hosts a Navy Reserve officer training program on campus that offers Naval scholarship opportunities and commissions for both the U.S. Navy and the U.S. Marine Corps. The college also enjoys a cooperative agreement with the U.S. Army for Army ROTC in conjunction with the University of Maine. Students in all majors may participate in ROTC and move on to military service careers.



Maine Maritime Academy students enjoy a modern student union and dining facility.

programming through the first six weeks of classes, completing extensive training during this MUG (Midshipmen Under Guidance) month.

A residential college, Maine Maritime Academy requires all students to live on campus unless they are 24 years or older, have an honorable discharge from the military, are married, or have lived in the residence hall for at least six terms. Currently MMA has about 200 commuting students. For those living on campus,

regimental and independent students live in separate areas of the residence hall for organizational and training purposes.

Master's Degree Program

During the 1970s, Maine Maritime Academy established the Center for Advanced Maritime Studies for those who were already professional mariners. Expanded in the late 1980s, the center became a modular-based master's degree program. This enabled active mariners to earn a master of science degree over a five-year period by taking five-week modules during their shoreside vacation periods.

While this program was designed primarily for U.S. mariners, international students composed the majority of the center's enrollment. Following 9/11, the program changed to a standard-semester graduate program, and now focuses on offering MS degrees in maritime management, international business, and global supply chain management. The school offers a reduced tuition incentive for MMA students who opt to receive a bachelor of science degree and immediately continue their master of science degree studies.

STCW

With the goal of enhancing career options for graduates, MMA has earned individual programmatic accreditation for three engineering majors and for the undergraduate program in international business and logistics. The advent of the International Maritime Or-

FOR MORE INFORMATION:

Maine Maritime Academy
Pleasant Street
Castine, ME 04420-5000
(800) 464-6565 (in state)
(800) 227-8465 (out of state)
www.mainemaritime.edu



ganization treaty and the Standards for Certification and Watchkeeping (STCW) has had a broad impact on the academy's license training programs. While the skills and knowledge specified by STCW have always been embedded in the college's curriculum and train-

ing programs, the certification requirements require an extensive system of assessment and recordkeeping.

Currently, 104 separate competencies for deck and engineering graduates must be assessed for each student.

Engineering

The engineering curriculum provides for six bachelor of science engineering degree majors.

Marine engineering operations: a traditional third assistant engineer's license program for students who want a career at sea.

Power engineering technology: a program that leads to a stationary plant operator's license for students who want to eventually move into power plant management. While no Coast Guard license is associated with this program, it allows students to sit for a professional engineer's license.

Power engineering operations: a program designed for students who want to be power plant operators.

Marine engineering technology: a major that includes more management, mathematics, and technology than the marine engineering operations curriculum. It is designed for students who may want to sit for a professional engineer's license in addition to the Coast Guard license. Students graduating with this major have greater opportunities for shoreside engineering careers while maintaining all of the engineering options for at-sea positions.

Marine systems engineering—license track: a two-year license program that follows a design engineer curriculum. Students in this program generally do not plan for a career at sea, and sit for

⊗ a professional engineer's license. Graduates generally move into design engineering or research careers. Graduates from this program sit for a USCG third assistant engineer's license as a value-added component.

⊗ Marine Systems Engineering—non-license track: a four-year program similar in every way to the license track, but without the USCG license option.

Deck

⊗ The Marine Transportation Department (deck department) has also embraced diversity by offering not only marine transportation operations (the traditional deck license program), but also offering associate as well as bachelor of science degree programs in small vessel operations.

⊗ The small vessel operations two-year associate degree allows a student to sit for a 200-ton mate's license. The four-year bachelor's degree allows one to sit for a 500-ton mate's license. These students actually take the same test as the unlimited third mate candidates, but have acquired sea time on limited tonnage vessels. Employment for these students exists in the inshore fleet on rivers and coastal waterways.

⊗ This major has become very popular, with many marine science and business students opting to add it as a second major at the time and expense of only one additional year of study.



The Maine Maritime Academy waterfront includes dockage for the 500-foot training ship *State of Maine* as well as a home for more than 60 vessels, including the tug *Pentagoet*, the research vessel *Friendship*, and the historic schooner *Bowdoin*.

These assessments are in addition to the academic requirements to successfully complete the courses. While the STCW program, as administered by the U.S. Coast Guard, is not referred to as an accreditation, in reality it is a rigorous programmatic accreditation.

Looking Forward

Diversification of academic programs, the addition of graduate degree offerings, and attention to accreditation and assessments at Maine Maritime Academy has resulted in an increased and stable enrollment. The academy reached its strategic goal of 800 undergraduate students three years ago and is currently struggling with more applicants than the college can accept.

This past academic year began with 889 undergraduate students and 16 in the graduate program. The diversification of academic programs has also led to an increase in the enrollment of women, with programs in international business and logistics, marine science,

and marine biology attracting the highest number of female applicants.

As MMA moves further into the 21st century, the college faces a number of opportunities and challenges. Overall, the placement of graduates has never been better, and graduates have been able to command substantial salaries. At the present time, and probably for some years to come, the job market for licensed graduates is excellent in both the blue water and coastal maritime industries.

About the author:

Mr. John Barlow was first appointed to Maine Maritime Academy in 1970. He presently serves as the vice president of academic affairs, provost, and the academic dean. His field of expertise is marine science. He received his B.S. degree from the University of Rhode Island in 1965 and Ph.D. from the University of Maine in 1969. He is the founding faculty member of the Corning School of Ocean Studies at Maine Maritime Academy, which offers B.S. degrees in marine science and marine biology.

Technology and Training



Students in USCG engineering license programs as well as students in marine sciences share chemistry labs.

Keeping up with technology has been—and continues to be—a challenge. Simulators, lab equipment, and training aids are increasingly obsolete soon after installation. With required STCW assessments, the need for simulation and modern shipboard labs continues to be crucial to license programs.

Maine Maritime Academy will continue to be challenged in the struggle between training and education. Our programmatic accreditors, including the Coast Guard, want assurances that students can demonstrate certain trained skills and knowledge. Our institutional accreditation means we must provide more to a student than skills and knowledge.

Students must understand theory and know about the process of learning not only on technical topics, but as part of a general education. We encourage our students to become lifelong learners who are comfortable with changing technology and are ready to assume leadership roles in a diversity of careers.

