

Recruitment, Retention, and Advancement of Women on Ships & Ashore

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Abstract

The maritime industry requires workers that are both well-trained and highly skilled. This is essential for the safe and efficient functioning and operation of the myriad shipping vessels that enable global commerce. Reliable and timely trade is critical not only to firms' profits but to local, national, and regional economies. To the end that qualified, competent, and hard-working mariners are indispensable to this endeavor, the industry is willing to reward such individuals with lucrative employment. It follows, then, that both men and women can benefit from seeking careers in the maritime industry. Nevertheless, shortfalls in masters, mates, and engineers plague the industry. To grow the requisite human capital to ensure the health of the maritime transportation system both today and well into the future, the industry must invest in women. While women presently comprise only a small fraction of the total maritime transportation workforce, they hold the key to future prosperity - not only of firms, but of regional, state, local, and household economies. Yet the path to the full participation of women in the maritime industry will require concerted efforts by those presently in positions of power and influence. As has been accomplished successfully in other professions, the maritime industry must actively promote women to serve in leadership and executive positions in the government, academia, unions, and board rooms; implement measures designed to stimulate the recruitment, retention, and advancement of women both on ships and ashore; and eliminate outdated exclusionary narratives.

Introduction - Mariners Needed

Widening gaps in qualified sea-going professionals world-wide has been on the radar of national governments and the maritime industry for quite some time. The popular press, industry publications, and military analyses often speculate as to the causal factors of this decline and prospective solutions to address it. Government officials and academicians have also provided thoughtful evaluations and policy recommendations, e.g., within the comprehensive Maritime Workforce Working Group (MWWG) Report of the U. S. Maritime System National Advisory Committee (2017)¹ and "Determinants of job satisfaction and performance of seafarers" (2018).²

Contemporary determinations of the health of the maritime industry, in terms of numerical strength and occupational qualifications, proves challenging given insufficiently coded data and poor government databases. In the United States, the primary database employed by government officials to capture personnel strength and qualifications is the Merchant Mariner Licensing and Documentation (MMLD) System. The MWWG determined that the records stored there could not be mined efficiently nor with the level of specificity required to inform accurately both policy and budgeting decisions. To augment available MMLD data, the MWWG sourced additional data

from vessel operating companies and labor unions, yet subsequently found the supplemental data redundant, misleading, or obscure. Unable to analyze these data in precise terms, e.g., differentiating mates from engineers or active versus inactive licensed mariners, the MWWG ultimately reported-out estimates concerning active unlimited tonnage credentials.

Academics and others have found current, open-source data on active mariners to be elusive. Access to the MMLD database would likely yield interesting longitudinal trends in unlimited tonnage credentialing for issuances of new, renewed, and upgraded licenses. Unfortunately, the U.S. Coast Guard's MMLD System is not publicly accessible. In the absence of publicly available MMLD source data, U.S. Department of Labor data provide an adequate, although not identical nor detailed, overview of employment trends. We must acknowledge, however, that these Occupational Employment data only serve as a proxy for licenses and, moreover, do not differentiate between certificated unlimited tonnage (i.e., open ocean, deep-sea) and limited-tonnage merchant officers.

Even so, a notable downturn in the employment of American captains, mates, and pilots (since 2016) and engineers (since 2006) might partially reflect the decline in American merchant marine officers who ship on their license (Figure 1). Challenges in retaining

¹ "Maritime Workforce Working Group Report." Washington, D.C.: U.S. Department of Transportation, Maritime Administration, September 29, 2017. <https://www.maritime.dot.gov/sites/marad.dot.gov/files/doc/s/mariners/1026/mwwg-report-congress-finalr3.pdf>.

² Yuen, Kum Fai, Hui Shan Loh, Qingji Zhou, and Yiik Diew Wong. "Determinants of Job Satisfaction and Performance of Seafarers." *Transportation Research Part A* 110(2018): 1–12.

skilled mariners within the global maritime industry can be attributed to many variables, including the availability of skills-appropriate maritime jobs, the affordability of accessible continuing education for license maintenance and upgrading, opportunities for diversification of experience across a variety of vessel platforms, quality of life determinations regarding

time spent at sea, insufficiency of job opportunities and/or reasonable wages, restrictive corporate policies, etc. Young mariners often cite such concerns, in various combinations, when considering whether or not to pursue or continue a career in the sea-going maritime shipping industry.

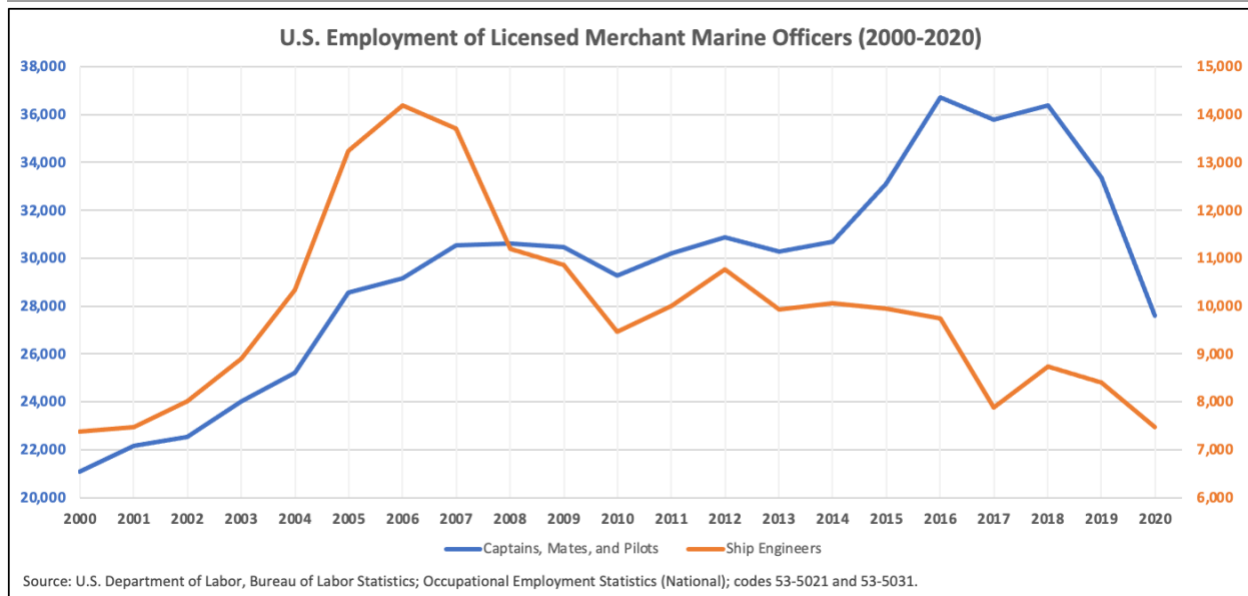


Figure 1. U.S. Employment of Licensed Merchant Marine Officers, 2000-2020.³

Understanding that licensure is key to aspirant maritime officers joining the commercial shipping labor force, national maritime academies essentially serve as both gateways and gatekeepers. Mariner officer candidates undergo rigorous training and education programs, traditionally within the formal setting of a maritime academy over four years or more, to earn their unlimited tonnage Third Mate (i.e., navigation and ship-driving) or Third Assistant Engineer (i.e., engineering plant control) licenses.

Such preparation is based upon universal requirements dictated by the International Convention on Standards of Training, Certification and Watchkeeping (STCW) (1978) and the International Convention for the Safety of Life at Sea (1974), both of which are maintained by the International Maritime Organization. Individuals holding unlicensed positions must also complete certain STCW requirements prior to working onboard commercial maritime vessels as boatswains, seamen, motormen, oilers, and wipers. These individuals typically complete their STCW training by attending

maritime training centers, institutes, or schools.

Note that the maritime industry requires workers who are both well-trained and highly skilled. This is essential for the safe and efficient operation of the myriad shipping vessels and shoreside facilities that enable commerce. Reliable and timely trade is critical not only to firms' profits but to regional, state, local, and household economies. To the end that qualified, competent, and hard-working mariners are needed to enable global commerce, the industry is willing to reward such individuals with lucrative employment.

It follows, then, that both women and men could benefit from seeking careers in the maritime industry.⁴ Likewise, the maritime industry benefits from the enlargement and diversification of the pool of skilled candidates from which to hire. As will be discussed herein, an existing and increasing shortage of qualified mariners worldwide will require an "all hands on deck" approach to staff the ships that ferry 90% of all materials and commercial goods between producers,

³ U.S. Department of Labor, Bureau of Labor Statistics; Occupational Employment Statistics (National); codes 53-5021 & 53-5031. <https://www.bls.gov/oes/tables.htm>

⁴ The authors employ conventional 'binary' gendered adjectives (female and male) and nouns (women and men)

herein, consistent with existing and available governmental data and metrics. This is not to overlook workforce participation and contributions of mariners who do not, themselves, identify as female or male.

manufacturers, and consumers. The global economy will depend upon the maritime industry resolving its workforce shortfalls. The answer resides in improving upon the recruitment, retention, and advancement of women who can, will, and do serve on seagoing ships and in maritime positions ashore.

Recruitment of Women Seafarers

The maritime transport sector has been slow to integrate women fully into its ranks. Too few career-oriented young women are aware of opportunities to join the industry via merchant marine academies, naval academies, and union training. Teenage girls and young women could benefit from learning that lucrative jobs await them in the maritime sector. Unfortunately, the maritime industry, as a whole, struggles to keep pace of other professional fields in appealing to young women as rational actors. Colleges, unions, and corporations are critical in this effort; each must respect the intelligence and potential of prospective female students and employees.

Counts of women working in the maritime sector are difficult to come by. No such official global count data presently exists. To overcome this impediment to research, the International Maritime Organization (IMO) and the Women's International Shipping and Trading Association (WISTA) signed a memorandum of understanding in 2020 to collect and analyze data on women working in the maritime sector.⁵

The July 2021 joint Baltic and International Maritime Council (BIMCO) and International Chamber of Shipping (ICS) *Seafarer Workforce Report* found that women constitute merely 1.28% of the worldwide seafarer workforce.⁶ Given the BIMCO/ICS report's "estimates that 1.89 million seafarers currently serve the world merchant fleet,"⁷ the approximate count of women seafarers⁸ amounts to only 24,000 globally. This is true at a time when the global shortfall of STCW-certified maritime officers exceeds 26,000.⁹ The BIMCO/ICS report projects that more than 89,000 maritime officers must join the workforce within the next five years to address anticipated demand in 2026.

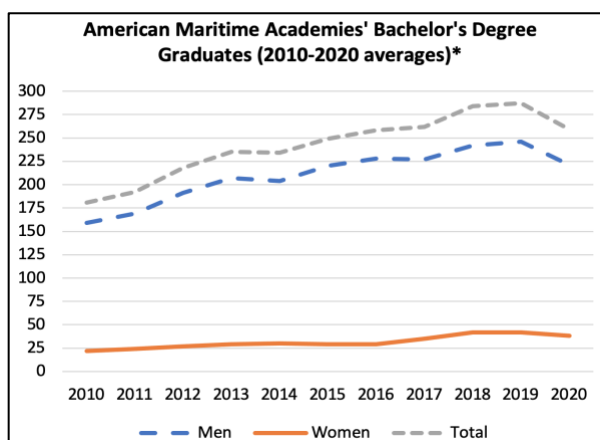


Figure 2. Average annual counts of bachelor's degrees awarded by American maritime academies and colleges as reported to the U.S. Department of Education, National Center for Education Statistics. <https://nces.ed.gov/ipeds/use-the-data>

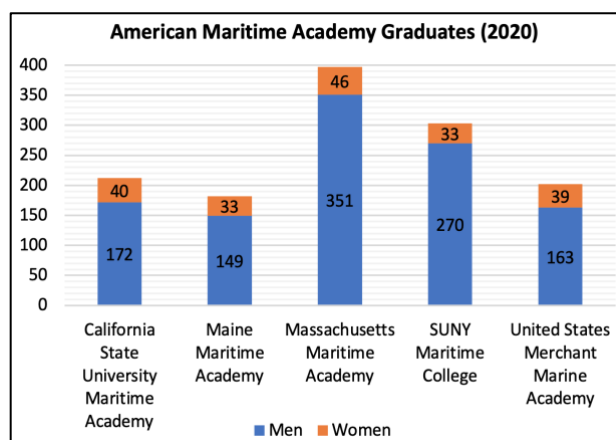


Figure 3. Bachelor's degrees awarded in 2020 by American maritime academies and colleges as reported to the U.S. Department of Education, National Center for Education Statistics. <https://nces.ed.gov/ipeds/use-the-data>

On its current trajectory, women's participation in the seagoing maritime workforce is not likely to increase significantly in the near future. One leading indicator includes final counts of recent female and male graduates of undergraduate maritime academies. For instance, in the United States, the average annual count of young women graduating from a maritime

academy or college has not grown appreciably in the past decade (Figure 2). Notably, female maritime graduates of California State University Maritime Academy (Cal Maritime), Maine Maritime Academy (Maine Maritime), Massachusetts Maritime Academy (Mass Maritime), State University of New York Maritime College (SUNY Maritime), and U.S.

⁵ For details on the IMO "Women in Maritime" program: <https://www.imo.org/en/OurWork/TechnicalCooperation/Pages/WomenInMaritime.aspx>

⁶ "New BIMCO/ICS Seafarer Workforce Report Warns of Serious Potential Officer Shortage." Press Release. London: International Chamber of Shipping, July 28, 2021. <https://www.ics-shipping.org/press-release/new-bimco-ics->

[seafarer-workforce-report-warns-of-serious-potential-officer-shortage/](https://www.ics-shipping.org/press-release/new-bimco-ics-seafarer-workforce-report-warns-of-serious-potential-officer-shortage/).

⁷ Ibid.

⁸ This number includes both officers and ratings.

⁹ "Seafarer Workforce Report: The Global Supply and Demand for Seafarers in 2021." Scotland, UK: BIMCO and International Chamber of Shipping, 2021.

Merchant Marine Academy (USMMA) comprised only 14.7% of the total number of these institutions' graduates who earned their bachelor's degree in 2020 (Figure 3).

While not every maritime academy or maritime college graduate earns an unlimited tonnage license or subsequently ships professionally as a deck officer or engineer, a good portion of graduates do. Licensing program graduates from the Cal, Maine, Mass, and SUNY maritime programs constitute between 60-80% of the students in each class. Moreover, all USMMA graduates must earn their U.S. Coast Guard license as a bachelor's degree (baccalaureate) requirement. Many who earn their coveted USCG unlimited tonnage Third Mate or Third Assistant Engineer licenses accept entry-level merchant marine officer positions following graduation.

Stated another way, while merchant maritime academy students receive an undergraduate education and earn their baccalaureates, the purpose-built, technical training they undergo within their programs leads to licensure. Aside from responding to the encouragement of their maritime academy professors, new graduates tend to ship professionally having been incentivized to do so when well-paid jobs are available to those in possession of a license. Given affordable, reliable, and structured paths to licensure through maritime academies, it should come as no surprise that maritime academy graduates comprise the bulk of all licensed merchant officers globally.¹⁰

Whether these young maritime officers remain in the merchant marine for a career at sea is another story.

The Criticality of Encouragement from Advisors, Mentors, and Role Models

New entrants to any industry naturally seek insights into the lived experiences of careerists' employment compensation, working conditions, hours and schedules, family timing, work-life compromises, promotion opportunities, and more. Advisors and mentors able to answer such inquiries can be found in many places and may or may not resemble their protégées. Career aspirants must not necessarily "see one to be one," i.e., observe a role model of the same

(perhaps 'underrepresented') gender, race, ethnicity, nationality, sexual orientation, or physical ability. However, some people prefer and/or respond well to a mentor with whom they share some resemblance.

Young women considering careers in the maritime sector sometimes have questions concerning gendered experiences of maritime work. In such circumstances, they (as well as their male counterparts) can benefit from observing and interacting with women in senior maritime industry positions both at sea and ashore. Likewise, mid-career mariners occasionally have their own unique questions. Mentors and role models who can speak authoritatively to their firsthand experiences as women in leadership and decision-making roles prove invaluable in response to such needs.

Senior women in the maritime industry exist; however, their numbers are few and the women themselves are geographically scattered. In 2020, according to the U.S. Coast Guard's National Maritime Center, of 18,655 U.S.-licensed unlimited tonnage ship captains, only 149 of that number were women,¹¹ or 0.0080%. Globally, women comprise an estimated 7,289 STCW-certified maritime officers of approximately 857,540 such officers,¹² or 0.0085%.

Women serving in elected or appointed leadership positions within maritime unions and training institutions are even more uncommon. At present, neither of the two largest maritime officer unions in the United States, American Maritime Officers' Union (AMO) or Masters, Mates, and Pilots (MMP), count even one woman among their union executive officers or leadership.¹³ The Marine Engineers Beneficial Association (MEBA), on the other hand, counts one woman among their five executive leadership positions, an Executive Vice President.¹⁴ Among the seven American maritime academies, not one is led by a woman Superintendent or President; neither is the U.S. Coast Guard Academy nor the U.S. Naval Academy. Women must have a voice in making decisions that affect women's training to operate, assignment to, and work onboard ships. Placing qualified women in influential positions of authority and responsibility is key to ensuring robust perspectives in conversations concerning an ever-changing and increasingly diverse industry.

¹⁰ Most American Merchant Marine Officers originate from one of these maritime academies rather than via expensive, ad-hoc coursework available through union or private training centers. Affectionately referred to as "hawsepipers," seamen and oilmen who work their way up from the decks to an officer's license (climbing up the anchor chain through the anchor's 'hawsepiper') are significantly less common.

¹¹ Alexandra Hagerty. "American Maritime Unions: Who Says It's a Man's World?" *Women Offshore* (blog),

September 10, 2021. <https://womenoffshore.org/american-maritime-unions-who-says-its-a-mans-world/>.

¹² BIMCO/ICS Seafarer Workforce Report 2021.

¹³ As of October 2021, per AMO <https://www.amo-union.org/news/2021/202110/202110.pdf> and MMP <https://bridgedeck.org/leadership/>

¹⁴ As of August 16, 2021, per the MEBA online directory [http://www.mebaunion.org/assets/1/6/00-MEBA_Directory_\(Current_as_of_8-16-21\).pdf](http://www.mebaunion.org/assets/1/6/00-MEBA_Directory_(Current_as_of_8-16-21).pdf)

National governments must also advance and promote women into key public service positions. Within the United States, e.g., the Maritime Administration (MARAD) oversees the maritime industry on behalf of the U.S. Department of Transportation. No woman has yet to serve as a presidentially-appointed Maritime Administrator. Notably, the present administration appointed a woman to the Deputy Administrator role; she was sworn in on the new president's inauguration day and immediately assumed responsibilities to serve as the MARAD Administrator in an acting capacity.¹⁵ In the search for a permanent Administrator, the Biden Administration requested the name of at least one female candidate from both AMO and MMP for consideration in its search for the next person to lead MARAD. Neither endorsed a woman for the position despite each boasting a rich list of female captains and chief engineers from which they might have chosen. Only recently, President Biden nominated Ann Phillips, a retired U.S. Navy "two-star" Rear Admiral with an impressive record of leading large commands and engaging with diverse stakeholders.¹⁶

All of this is not to suggest that there are no women in high profile maritime industry positions. Despina Panayiotou Theodosiou serves as the President of WISTA International. Jillian Carson-Jackson steers the ship as President of The Nautical Institute. BIMCO's current President and Board Chairperson, Sabrina Chao, recently succeeded BIMCO's first woman President, Sadan Kaptanoglu. Cleopatra Doumbia-Henry is President of the World Maritime University. Three women have seats on the board of the International Chamber of Shipping: Vice Chair Caroline Yang, President of Singapore Shipping; Karin Orsel, CEO of MF Shipping Group; and Henriette H. Thygesen, Executive Vice President of A.P. Moller-Maersk. Ally Cedenio is at the helm as President of the Women Offshore Foundation. Linda Fagan is the U.S. Coast Guard Vice Commandant; while one of several women to have held the position, she is the service's first female "four-star" Admiral.

Recruitment – Welcome and Encourage Women

Yes, there are women whom we can name and celebrate as maritime leaders. Some have experienced shipping out to sea, while others have not, e.g.,

attorneys, businesswomen, economists, et al, with no prior experience working onboard a ship. In all cases, their accomplishments are inspiring. Yet to grow the number of women leading maritime organizations, boards, academies, and more – we must all continue working to recruit women into the maritime sector.

This is not without its challenges. A.P. Moller-Maersk A/S Chairman Jim Hagemann Snabe admitted in March 2021 that "we [simply] don't get enough women up through the management system."¹⁷ In fact, Snabe argued that his "experience is that [women] are at least as skillful, if not more skillful, than their male colleagues," asserting that Maersk must "take advantage of that."¹⁸ The leadership team at Maersk is now working to make meaningful improvements. Rather than simply hiring more women executives for the sake of female representation, Maersk seeks to change recruitment systems within the company, i.e., those designed to invite and train junior employees to take on entry-level management positions. Comments like Snabe's signal that a prestigious company like Maersk values women as an asset at the managerial and executive levels. Other companies would do well to follow suit. Greater numbers of women in the leadership pipeline should result in more women competing for C-suite positions – and earning those top spots. Such public commitments generate both curiosity and enthusiasm among women interested in joining and remaining within the maritime industry.

As companies grow to appreciate women's leadership and work potential, the implementation of smart recruitment and retention policies will facilitate the hiring and promotion of women to fill and strengthen each firm's workforce. In male-dominated industries like maritime transport, this necessarily requires men in executive leadership and managerial positions, whether executives within corporate or master mariners onboard ships, to encourage and respect women. This means training, educating, encouraging, and promoting women within the company – just as has been done for their male counterparts. Doing so reinforces the vital role women play in the financial success of their firms. As Karin Orsel, CEO of MF Shipping Group, has emphasized, "We find a diversified workforce, both on board our ships and at the office is one of our strongest assets. Diversity,

¹⁵ Lucinda Lessley is the Maritime Administration's Deputy Administrator. She has served as the Acting Administrator since she was sworn into her appointed Deputy position on January 20, 2021. <https://cms.marad.dot.gov/office-administrator/key-personnel/acting-administrator>

¹⁶ "President Biden Announces Key Nominations," Press release. The White House, Washington: October 14, 2021. <https://www.whitehouse.gov/briefing-room/statements->

[releases/2021/10/14/president-biden-announces-key-nominations-5/](https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/14/president-biden-announces-key-nominations-5/)

¹⁷ Wienberg, Chris. "Shipping Giant Maersk Can't Get Enough Women in Its Top Jobs - Bloomberg." *Bloomberg*, March 23, 2021, online edition, sec. Equality.

<https://www.bloomberg.com/news/articles/2021-03-23/shipping-giant-maersk-can-t-get-enough-women-to-chase-top-jobs>

¹⁸ Ibid.

Equality and Inclusiveness are key in providing a sustainable future for the global maritime industry and our company.”¹⁹

Of course, women who serve as licensed maritime officers typically start at one of a number of maritime academies around the world. Studying today’s public-facing internet profiles of maritime academies, unions, and companies yields insights as to whether such institutions actually encourage and enable women to pursue licensure and maritime work. The presence or absence of visual imagery on websites and marketing materials depicting women students, workers, officers, and executives sends clear signals to women looking to enter the maritime industry. This especially matters at accession points, when young women make qualitative assessments as to maritime programs’ ‘openness’ to educating and training female students. Women candidates pay attention to welcoming wording aimed at recruiting female students, photography depicting the involvement of female students in both marine transportation and marine engineering laboratories, profiles of female faculty members and instructors, and news articles celebrating the accomplishments of female students, faculty members, and graduates.

Viewing global maritime institutional websites makes it quite apparent that women, where they are accepted and educated, tend to enroll in maritime business, marine science, and marine engineering programs. These preferred programs tend to celebrate this fact in their photo collages, encouraging women to study business and marine science above other options. As for marine transportation programs globally, few photos or videos of female maritime cadets currently appear online. Where maritime institutions also host graduate programs, relatively more women appear in their operations, logistics, and management programs’ imagery than in undergraduate, sea-going programs.

Marine transportation programs that employ women as faculty members often only employ a token one. This could be attributable to the already-low numbers of women who possess the requisite experience and interest to teach maritime transportation coursework. Those women who do pursue teaching tend to be relatively newer graduates than their male counterparts, some of whom are in their sixties or seventies and had the opportunity to go to sea decades before women ever could.

Female students who do attend marine transportation programs tend to flock to the most well-established and prestigious. An inference might be made that they intuitively seek out programs where a ‘critical mass’ of young women are enrolled, with whom they can study and, perhaps, do so safely. Examples of programs that are well attended by women include Germany’s Emden/Leer, America’s ‘California Maritime’ and ‘Massachusetts Maritime,’ Spain’s Barcelona School of Nautical Studies, and Algeria’s Ecole Nationale Supérieure Maritimee.

Retention – Create Opportunities for Women

Following the announcement of the IMO and WISTA International ‘Women in Maritime Survey 2021,’ IMO Secretary-General Kitack Lim emphasized that governments, along with maritime academies, unions, and companies, “need solid data on female participation, as this will enable us to track and quantify our ambitions in what has traditionally been a male-dominated sector.”²⁰ The report promises to deliver metrics on “the proportion and distribution of women working in the maritime sector, from support roles to executive level positions.”²¹ Data collection from United Nations/IMO member states, non-governmental organizations, and shipping companies closed on July 30, 2021; the promised report is already highly anticipated.

This groundbreaking survey promises to provide a global count of women in the maritime industry. Researchers hope that future surveys will expand upon the baseline counts collected in 2021. Accession sources, license levels, tonnage qualifications, executive pay grades or position levels, years in the maritime industry, women’s ages, marital, and motherhood demographics are all desirable data that could be critical in constructive discussions on women in the maritime workforce. Longitudinal data analyses will be essential to gaining insight into women’s career transitions between afloat and ashore positions, deep-sea commercial ship jobs and coastal shipboard employment, and junior to senior maritime officer or corporate positions, to name a few such career moves.

These data will prove key to elucidating where policy interventions might be required. By this, we do not mean the development and implementation of standard policies for the fair and equal treatment of women in the workplace, e.g., those that address workplace harassment and sexual assault. Such anti-

¹⁹ gCaptain. “New ICS Report Sheds Light on Diversity in Shipping,” November 4, 2020. <https://gcaptain.com/ics-report-sheds-light-shipping-industry-diversity/>.

²⁰ “IMO and WISTA International Launch First Women in Maritime Survey.” Press Release. London, U.K.:

International Maritime Organization, n.d. <https://www.imo.org/en/MediaCentre/PressBriefings/pages/06-IMO-WISTA-Survey.aspx>.

²¹ Ibid.

harassment and anti-assault policies should be the norm for any profession, irrespective of the gender(s) of the parties involved. Rather, these demographic data ought to facilitate deeper conversations on the retention of women in the maritime workforce. When analyses highlight statistically significant findings on challenges faced by women in the maritime workforce – those in positions to effect change must ask why.

When the data demonstrated to the U.S. Coast Guard that young women junior officers were departing from military service in the late 1980s/early 1990s at an alarmingly increasing rate, the organization quickly implemented a policy aimed at retaining a particular sub-set of women. The ‘Care of Newborn Children’ program, implemented in 1991, enabled new mothers to step away from active duty for a period of up to two years.²² Upon return, they would re-assimilate at their previous rank and within their prior career specialty. The program grew in popularity and was later expanded to allow all active duty servicemembers, irrespective of gender, up to two years to pursue other opportunities and subsequently return. The Coast Guard’s decision was strategic and sound, i.e., the organization realized that retaining trained, qualified, competent, proven talent was worth accommodating the needs of a small group of individuals annually – most of whom returned to the fold and contributed at high levels for years and decades afterwards.

No one company must solve every challenge for every single one of its workers. However, strategically affording employees assistance within the scope of what might be possible can go a very long way to retaining individuals while earning their loyalty. Many solutions are relatively temporary, e.g., adjusting an employee’s work location for a few months or years following the birth of an infant, the illness of a spouse, the death of a parent, or a cancer treatment. So many women and men would jump at alternatives that would enable them to bring to the company their enthusiasm, field experience, and more. In most seagoing military services, this is a question of creating a ship-shore rotation to enable members to engage in logistics, procurement, policy, and strategy work during periods when they are not assigned to a ship.

In the United States, ‘Jones Act’ American mariners can take advantage, for example, of working within MARAD’s Ready Reserve Force (RRF). Some licensed mariners among the RFF enjoy opportunities to work full-time onboard ships that remain in port for long periods of time in a Reduced Operating Status (ROS). Such ships present women, especially those

who have certain responsibilities for raising young families, with obvious opportunities to work from Monday to Friday onboard a ship, albeit pier side. Educating young women about positions onboard ROS sealift vessels would enable women not only to raise small children, assuming some might have them, but also to pursue their education, adjudicate medical concerns, participate in maritime organizations, and attend union training to diversify their maritime skills. All of this would be possible while concurrently accruing sea time, working onboard a ship, and remaining current on industry developments. Ultimately, encouraging women to consider working in ROS positions benefits the industry.

Firms should not assume that women in the maritime industry will simply park themselves at such positions outside of the company and then return once their circumstance change. Firms that wish to take advantage of the past training, education, and experience of women must develop creative retention solutions internally. Women respond to incentives that make good financial sense; to this end, firms must offer a wide variety of opportunities for guaranteed maternity leave, sabbaticals, frequent and reliable crew reliefs, and temporary work ashore, plus training and education towards advancement. Arguably, unions should be involved in efforts to identify and disseminate solutions, too. In all cases, it is essential to seat women at the table to suggest, develop, and implement such solutions. Suffice it to say that women sitting at the table must also be respected, heard, encouraged, and empowered to participate fully by male peers, supervisors, managers, and executives.

Advancement – Invest in the Future of Women

Future needs for qualified merchant marine officers will extend beyond already excessive present demands of government sealift and commercial trade fleets. Case in point, two burgeoning fields, the ‘offshore wind’ and ‘space’ industries, currently recruit and engage mariners to enable the installation of windmills offshore and to operate new vessels for the launch and recovery of space vehicles, respectively.

SpaceX announced, while speaking before the Council of American Master Mariners Conference in Port Canaveral earlier this year, an expectation that anticipated growth in their fleet of SpaceX support vessels will lead to not-insignificant job creation in the maritime sector. SpaceX already employs mariners to tow barges that have been modified to serve as rocket landing platforms. Interestingly, the “USCG estimates

²² “Temporary Separation Program Update.” U.S. Coast Guard Human Resources Directorate, Flag Voice #523. Washington, D.C.: June 3, 2020.

<https://www.dcms.uscg.mil/Portals/10/CG-1/flagvoice/docs/pdf/FlagVoice523TemporarySeparationUpdate.pdf?ver=2020-06-04-103218-213>

that a fleet of seven or eight space support vessels can create the same amount of regulatory work as 200 merchant vessels... [given that] technology in the space industry is changing so rapidly that the owners of space support vessels request changes to regulated shipboard equipment weekly.”²³ Such challenges hint at future opportunities for licensed mariners to bridge gaps between the space industry and governmental regulators and inspectors.

The wind farm industry will likewise require mariners to operate their support vessels and engage with government officials on wind projects. One initiative to prepare individuals for jobs in this sector is the “Offshore Wind Workforce Development Project at SUNY Maritime College,” which recently received federal funding to train entry-level offshore wind construction workers, mechanics, high voltage electricians, welders, et al.²⁴ Another program has Crowley Maritime Corporation partnering with Massachusetts Maritime to train and recruit maritime cadets for future work in offshore wind.²⁵

As both industries grow, maritime jobs within space and offshore wind may well provide excellent opportunities for female maritime officers, attorneys, businesswomen, et al, to enjoy early upward mobility and long-term gainful employment. The expanding ‘Blue Economy’ already requires more mariners than ever before. The maritime industry must tap into the “other half” of the population, i.e., *women*, to grow its workforce. Doing so will require making wide ranging investments in the future of women – through training, education, common-sense employment policies, ship to shore transitional opportunities, mentoring, seats on boards, leadership positions within unions, faculty positions, managerial development, and more. All of this is work that is critical to the elimination of outdated exclusionary narratives and the full inclusion of women in the maritime workforce.

Conclusions

Women’s participation in the workforce serves as one heuristic by which we might gauge the economic or financial health of a region, state, company, or household. A minimal difference between the employment of women and men in a society or sector roughly signals both progress towards equality and an optimization of human capital in the labor market.

Maritime organizations, unions, and companies concerned with improving opportunities and access for women working within the maritime industry must continue having conversations about equality and equity – and then put solutions into practice. Addressing labor shortfalls in the maritime sector will require the thoughtful and active recruitment, retention, and advancement of women.

Understanding that women are not monolithic in their thinking, the ultimate decision to pursue and remain in a maritime career will reflect the unique judgment of each individual woman. This having been said, such decisions are often made after the consideration of certain obvious factors, e.g., compensation, workplace climate, working conditions, opportunities to advance, work hours and schedules, time off and vacation days, health care plans, sick time, family leave, travel expectations, licensure requirements, industry and/or corporate culture, and more. In so many respects, such concerns transcend gender. The recruitment and retention of women maritime professionals requires having honest, constructive conversations regarding the aforementioned issues that respects women as the self-actualized and intelligent persons they are.

The era of shoulder shrugs and assertions that “women do not want to work in the maritime industry because they want to have children and raise families” is over. Yes, women might want and need ship-shore rotations and transitions at various times during their career, but so do men. For all, stepping away from shipping for a period of time is not always done to the end of birthing or rearing children. To facilitate creative solutions, women can, should, and frequently do lead discussions to the ultimate benefit all.

Shipping offshore for a decades-long career can be intrinsically satisfying and financially lucrative. For those who wish to transition earlier in their careers, opportunities to work in the maritime industry ashore are endless. The possession of an unlimited tonnage license enables individuals to teach, manage ports, run businesses, create policy, serve on corporate boards, engage in executive management positions, and much more. The future of maritime must include, invest in, advance, and promote women. Doing so will ensure top talent on the bridge and in the boardroom – as both women and men lead their teams and crews in managing the work of companies and ships.

²³ “Maritime and the New Space Age.” *Sidelights: The Council of American Master Mariners, Inc.*, Summer 2021. <http://mastermariner.org/assets/sdlts-summer-2021.pdf>.

²⁴ Schuler, Mike. “Offshore Wind Workforce Development Project at SUNY Maritime College Passed by the House.” gCaptain, August 31, 2021. <https://gcaptain.com/offshore->

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²⁵ Schuler, Mike. “Crowley and Mass Maritime Partner on Offshore Wind Workforce Training.” gCaptain, August 24, 2021. <https://gcaptain.com/crowley-and-mass-maritime-partner-on-offshore-wind-workforce-training/>.

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