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DEPARTMENT OF HOMELAND SECURITY

U. S. COAST GUARD

STATEMENT OF

REAR ADMIRAL JOEL WHITEHEAD

ON

MARINER EDUCATION AND WORKFORCE

BEFORE THE

SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

U.S. HOUSE OF REPRESENTATIVES

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Good morning Mr. Chairman and distinguished members of the Subcommittee. I am Rear Admiral Joel Whitehead, Commander, Eighth District, United States Coast Guard. The Eighth Coast Guard District is the largest of nine Coast Guard Districts and covers 26 states, more than 1,200 miles of coastline and 10,300 miles of inland waterways from Florida to Mexico and including the entire navigable lengths of the Mississippi, Ohio, Missouri, Illinois and Tennessee River systems. I am pleased to have this opportunity to appear before you today to discuss the Coast Guard's role in Maritime Education and Workforce.

Statement Overview

This document provides an overview of the merchant mariner training program in place to meet United States Government responsibilities under the International Maritime Organization's Standards of Training, Certification and Watch keeping for Seafarers Convention (STCW Convention), 1978, as amended, including:

- the history and evolution of the STCW Convention;
- the domestic training requirements in place prior to the implementation of the STCW Convention;
- the 1995 amendments to the STCW Convention;
- the changes to the domestic training requirements to implement the 1995 amendments to the Convention;
- the future changes to the training requirements 10 years after the implementation of the 1995 amendments to the Convention; and
- the IMO comprehensive review of the STCW Convention.

In addition, the document outlines mariner workforce-related issues and initiatives currently being implemented by the Coast Guard, including:

- our relationship with the Maritime Administration (MARAD);
- our involvement in maritime employment;
- our role in international forums;
- improvements to the credentialing and licensing program; and
- future improvements to benefit merchant mariners.

MERCHANT MARINER LICENSING AND DOCUMENTATION PROGRAM

The Coast Guard sets standards of training and qualification for seafarers and administers the Mariner Licensing and Documentation (MLD) program in compliance with domestic and international law. The aim of the program is to ensure U.S. vessels are manned by qualified, trained and competent personnel. The program's standards fulfill U.S. responsibilities under the IMO's STCW Convention, as amended.

STCW Convention Overview

In the late 1950s and early 1960s, the IMO developed a comprehensive series of conventions to establish a framework of international law addressing maritime safety and environmental protection. In developing this framework, the IMO, recognizing the most important element in the safe operation of any ship is the competence and experience of its crew, noted it lacked an international standard of competency for seafarers. In 1969, the IMO agreed to develop a draft STCW Convention.

The STCW was adopted by Conference at the IMO in 1978 as the first international attempt to standardize the qualifications required for masters, officers and watch personnel on seagoing merchant ships. The U.S. deferred ratification efforts in order to make necessary changes to our licensing regulations in order to meet the Convention requirements. Subsequent to making these changes, the U.S. became party to the STCW Convention in 1991.

The 1995 amendments to the STCW Convention

The 1978 STCW Convention had many limitations. These included vague requirements left to the discretion of parties; no clear standards of competence; no IMO oversight of compliance; limited port state control and inadequacies which did not address modern shipboard functions. In 1992, the IMO's Maritime Safety Committee (MSC) agreed to a U.S. proposal to conduct a comprehensive review of the 1978 Convention. This U.S. proposal suggested the review specifically consider the role of the human element in maritime casualties. IMO and its members agreed the time had come for the organization to concentrate on areas relating to people, training and operational practices, rather than issues dealing with improving ship construction and equipment standards.

The STCW Convention was subsequently significantly amended in 1995 to include a Code containing mandatory requirements and guidance information for the implementation of the Convention. These amendments entered into force on February 1, 1997. Parties to the Convention had five years in which to fully implement the new Convention, allowing for a transition or "gap-closing" period during which mariners who already held licenses and endorsements, or had begun the service and training to obtain them, were not required to meet the full training and assessment requirements. This transition period ended on February 1, 2002.

The comprehensive and detailed 1995 amendments established a level playing field among all parties to the Convention to help ensure consistent training worldwide. These amendments also established competence-based standards that placed emphasis on the requirements for training and assessment of skills in almost every facet of the mariner's profession.

The most notable changes to the convention included:

- Examinations and demonstration of skills
The requirements established minimum standards of competence for the range of certificates to be issued under STCW. These standards were presented in tables specifying the competence; the corresponding list of knowledge, understanding

and proficiencies associated with each competence; the methods for demonstrating each competence; and the criteria for evaluating each competence. The amendments also introduced an accepted method of determining competence through a combination of training and practical demonstration of professional ability.

- Quality Standard System (QSS)

The requirements required all training, assessment and certification activities be “continuously monitored through a quality standards system to ensure achievement of defined objectives, including those concerning the qualifications and experience of instructors and assessors.” Furthermore, the Convention required the quality standard system be subject to an independent evaluation every five years.

- Enhancement of Port State Control

The 1995 amendments strengthened the port state control provisions of the Convention by expanding the grounds on which a foreign ship could be detained and allowing port state control officers to look beyond merchant mariner certificates and conduct a direct assessment of the competence of merchant mariners.

Domestic Training Requirements

Although the U.S. became party to the STCW Convention in 1991, the Coast Guard did not publish an interim rule implementing the Convention until June 26, 1997.

The domestic regulations in place until that point required a mariner to obtain service, training, and assessment in order to obtain certification. To qualify for an entry-level license, mariners were required to obtain between 12 and 36 months of sea service. Training requirements included Radar Observer, Basic and Advanced Fire Fighting, First Aid and Cardiopulmonary Resuscitation (CPR). Additionally, mariners needed to pass a professional examination to assess their competency, commensurate with the level of the license sought. Those individuals going through Federal, State, and military maritime academies could obtain the entry-level license with 12 months of sea service and experience, since the formal academy training was accepted in lieu of sea service.

Licensed officers continued to advance their professional qualifications and credentials through on-the-job-training. As a mariner acquired one level of professional qualification, he or she would begin to work towards the next level of professional qualification. This advancement experience was achieved through actual sea service on a vessel, where the nature of the sea service was prescribed by regulation. After the mariner acquired the required experience, he or she would be examined by the Coast Guard. The only additional formal training required for a licensed officer to progress to a more senior license was Advanced Fire Fighting, Radar Observer, First Aid and CPR. If the mariner passed the professional examination and met all other requirements (training (i.e. Fire Fighting, First Aid), personal character, and medical) he or she was issued the upgraded credential.

A credential for unlicensed ratings could be obtained by acquiring sea service and completing a Coast Guard administered examination. Although training was not required, a mariner could use training to substitute for the examination and up to one-half of the sea service requirement.

Domestic implementation of the 1995 amendments to the STCW Convention

The 1995 amendments to the STCW Convention required a mariner to obtain service, training, and assessment in order to obtain certification. The primary differences between the 1995 amendments and the U.S. regulations in place at the time were the amount, type and methods of training, and the methods for assessment associated with each certificate. In particular, the 1995 amendments required specific courses including classroom and simulator training and the practical demonstration of skills. Additionally, STCW established a requirement of three years experience for all mariners who did not participate in an approved training program for an entry-level license. An example of the differences between STCW and domestic requirements for licenses for a Master's Ocean License is depicted in Table 1.

After a series of notices, public meetings and a lengthy comment period, the Coast Guard published an Interim Rule on June 26, 1997, to implement the 1995 amendments. The rule retained the existing licensing structure and incorporated STCW training and the practical demonstration of skills requirement; oversight requirements; and transitional provisions for existing credentialed mariners

This rule impacted mariners serving on commercial seagoing vessels over 200 gross registered tons whether operating on a domestic or an international voyage. This rule did not impact mariners serving on seagoing vessels less than 200 gross registered tons on domestic voyages, or mariners serving on non-seagoing vessels (e.g. inland towing vessels).

These regulations effected several sectors of the U.S. maritime industry in the following ways:

- Mariners are responsible for the costs of training, housing, and per diem. Additionally, shore-based training requires mariners to spend time ashore undergoing training, time during which they could be otherwise earning wages or on leave.
- Training providers are responsible for the course development costs, the cost of a quality standard system to oversee and administer the training, and the administrative costs associated with record-keeping.
- Shipping companies bear the cost of the loss of available trained personnel who are undergoing additional training, the increased cost to employ more highly-trained personnel, the costs associated with developing company training and the record-keeping requirements associated with the training of personnel.

Table 1
TABLE OF DIFFERENCES - MASTERS LICENSE

Requirement	Pre - STCW	Post - STCW
Service	12 months as Chief Mate	12 months as Chief Mate
Training	<ul style="list-style-type: none"> • Approved firefighting course* • Approved radar observer course • Qualification as Able Seaman • First Aid/CPR* 	<ul style="list-style-type: none"> • Management level training that provides the knowledge and understanding requirements of the demonstrations of skill • Approved firefighting course* • Approved radar observer course • Qualification as Able Seaman • First Aid/CPR* • Basic safety training • ARPA course • Global Maritime Distress and Safety System (GMDSS) radio operator course • Bridge teamwork course • Search and rescue course • Person-in-charge of medical care course
Assessments	<ul style="list-style-type: none"> • Professional examination • Flashing Light demonstration 	<ul style="list-style-type: none"> • Professional examination • Flashing Light demonstration • Practical demonstration of skills in the following areas: <ul style="list-style-type: none"> ○ Plan a voyage ○ Determine position ○ Determine and allow for compass errors ○ Coordinate search and rescue operations ○ Establish watch keeping arrangements and procedures ○ Forecast weather and oceanographic conditions ○ Respond to navigational emergencies ○ Maneuver and handle a ship in all conditions ○ Operate remote controls of propulsion plant and engineering systems and services ○ Plan and ensure safe loading, stowage, securing, care and unloading of cargoes ○ Assess reported defects and damages to cargo spaces and take appropriate action ○ Carriage of dangerous goods ○ Control trim, stability and stress ○ Monitor and control compliance with legislative requirements ○ Maintain safety and security of the ship's crew and passengers ○ Develop emergency and damage control plans and handle emergencies ○ Organize and manage the crew ○ Organize and manage the provision of medical care on board

* If not previously completed

Future changes in domestic regulations

The Coast Guard is currently reviewing the 1997 Interim Rule and is considering seeking additional comments. Issuing a revision at this time is necessary to:

- clarify regulations that have generated confusion;
- incorporate changes generated by the comments to the published Interim Rule;
- incorporate lessons learned during the ten year implementation period; and
- address recommendations from the independent evaluation (audit) of the mariner licensing and documentation program, the results of which were submitted to the IMO in 2003 as required by STCW.

The Coast Guard has engaged the Merchant Marine Personnel Advisory Committee (MERPAC) to provide recommendations on a number of issues under review.

Potential solutions to reduce the challenges from the implementation of the STCW Convention

The STCW Convention sets a minimum threshold upon which all countries must comply to ensure the competency of their seagoing mariners. It is designed to promote a uniform, international standard of shipping safety. The United States, as one of the world's largest port states, benefits from this uniformity when foreign vessels with foreign crews call in our waters.

Reciprocally, we are required to meet the same standards of competence for our mariners. As such, the Coast Guard is limited in authority to reduce the burden of implementation, particularly with respect to required training. Notwithstanding, the Coast Guard is examining other methods for implementation of the STCW requirements. As the Coast Guard restructures and centralizes the Mariner Licensing and Documentation (MLD) Program, we are examining areas where potential exists to develop process improvements leading to a reduction in the burden on the maritime industry. We are also examining other forms of training, such as computer-based training and distance-learning initiatives, which have the potential to provide the individual mariner savings in the cost of transportation and berthing for training and provide the mariner the opportunity to take the training on the job/ship.

We will continue to take advantage of our partnerships with other agencies, ship owners and seafarer organizations to help address the challenges associated with STCW. This cooperative examination of the current training processes will result in initiatives designed to provide the mariner with necessary competence while ensuring safe, secure, and environmentally sound maritime operations.

Future of IMO regulations - STCW Comprehensive review

In January 2007, the IMO began a comprehensive review of the STCW Convention. The IMO expects the review will take two to four years to complete and the resulting amendments to the Convention will enter into force in five to seven years. The review is limited in scope to avoid any unnecessary amendments or reduction of the very successful training regime. The review also aims to refine the Convention based on

lessons learned and include changes and new technology. The Coast Guard supports the comprehensive review, since it presents an opportunity to look for alternative training approaches not considered during the 1995 amendments which may help reduce the burdens imposed by the implementation of STCW.

To prepare the U.S. position for the comprehensive review, the Coast Guard is engaging various advisory Committees. The Merchant Marine Personnel Advisory Committee (MERPAC) provided recommendations on the issues open for review. Their input will be used to assist in the development of the U.S. position during the negotiations at IMO. The Coast Guard will also seek input from the Towing Safety Advisory Committee and the Shipping Coordination Committee, which is administered by the Department of State.

WORKFORCE INITIATIVES

Coast Guard and MARAD cooperative efforts supporting maritime employment

The Maritime Administration (MARAD) has the lead on issues relating to maritime workforce development; however the Coast Guard provides a significant supporting role. For example, the Coast Guard co-sponsored two industry meetings on mariner recruitment and retention in 2001 and 2002. These meetings focused on the status of the U.S. labor force and recommendations on initiatives which may be pursued to alleviate some of the problems associated with the shortage of U.S. qualified mariners. Following the 2002 meeting, the Coast Guard and other participants requested that the MARAD-sponsored Ship Operation Cooperative Program (SOCP) continue the work. Today, the Coast Guard serves as a participating member in the MARAD-facilitated SOCP. SOCP is an industry-government forum which serves as a venue to discuss maritime related issues.

The Coast Guard also supports other agencies in the development of programs to facilitate employment in the maritime industry. For example, the Coast Guard worked with the U.S. Army and Navy to develop programs to assist service personnel to transition from the armed forces into maritime employment. Through MERPAC, the Coast Guard assisted these agencies in obtaining credit and recognition of military service and training towards obtaining merchant mariner credentials.

The Coast Guard also currently recruits maritime graduates from the U.S. Merchant Marine Academy and the six state maritime academies as entry level Coast Guard officers. The Coast Guard currently has liaison officers assigned to the U.S. Merchant Marine Academy and California Maritime Academy. Our recent report to Congress, *“Enhancing the Coast Guard’s Marine Safety Program,”* recommends an increase of the number of maritime graduates serving in the Coast Guard in support of the maritime safety mission. To improve maritime graduate accession, the Coast Guard is considering increasing the number of liaison officers to the maritime Academies.

The Coast Guard and the MARAD do share statutory responsibilities in assuring U.S. merchant marine vessels are manned by qualified, trained and efficient personnel. The Coast Guard works with MARAD in the area of maritime training and crew

qualifications to meet our international and domestic regulatory responsibilities. On a number of occasions the two agencies have combined both financial and personnel resources in the area of maritime training and qualifications.

The Coast Guard and MARAD work closely on the implementation of the STCW Convention. The two agencies co-Chair the “Joint Maritime Administration and Coast Guard Maritime Academy STCW Review Committee,” responsible for overseeing and evaluating the implementation of STCW at the U.S. Merchant Marine Academy and the six state maritime academies. The Joint Academy STCW Review Committee completed the mid-term audits of the U.S. Merchant Marine Academy and the six state maritime academies in 2006, as required by the STCW Convention, to ensure that those providing the training are monitored under a quality standard system.

The Coast Guard and MARAD have worked together on the following initiatives:

- Supporting training providers in obtaining assistance for their programs, including acquiring training equipment such as lifeboats and fire-fighting equipment.
- Developing maritime training standards and model training programs to meet domestic and international requirements such as the Global Maritime Distress and Safety System (GMDSS), the liquefied natural gas standards; and maritime security training standards and model courses.
- Preparing for international meetings such as the International Labor Organization (ILO) Maritime Labor Convention, 2006, and the development of a U.S. position on the Comprehensive review of the STCW Convention.
- Facilitating the use of grant monies for training of mariners by obtaining Department of Labor classification as “apprenticeable” of certain rating positions including Able Seamen and Qualified Member of the Engineering Department.
- Facilitating the gathering of merchant mariner licensing and documentation data in support of the MARAD “Mariner Outreach System” (MOS) initiative.

Coast Guard role in high school and college maritime education programs

The Coast Guard evaluates maritime education programs for compliance with domestic and international requirements, and for their efficacy in producing qualified, competent mariners. The Coast Guard routinely assists educational organizations, including colleges and high schools, in developing and obtaining approval for maritime training programs.

These efforts include meeting with and advising schools of Coast Guard requirements and providing model courses and other tools to assist in program development. Thirty college and high school maritime training courses and programs have been approved to date.

As described above, the Coast Guard also approved the training programs provided by the U.S. Merchant Marine Academy and the six state maritime academies as meeting the requirements of the STCW Convention.

Coast Guard role in international forums

The Coast Guard plays a vital role in international forums relating to people, training and operational practices. We continue to stress in a number of forums that ship construction and equipment standards are only as good as the human element related standards and practices that accompany them.

Due to the increasing globalization and changes in the maritime industry labor force, international forums play a more vital role than in past years, requiring consistent and continued representation from the U.S. The most important international forums which impact maritime personnel are the ILO and the IMO. The Coast Guard continues to support both organizations with strong technical and political expertise. To ensure the consistency and continuity of U.S. positions, goals and objectives, representation on both organizations is provided by the Coast Guard Office of Operating and Environmental Standards, Maritime Personnel Qualifications Division, which is composed primarily of civilian personnel.

The Coast Guard serves as the Head of Delegation to the Sub-Committee on Standards of Training and Watch keeping (STW), the IMO body chartered to deal with issues related to maritime training and qualifications, including the STCW Convention. This body meets annually to discuss training matters under consideration at the IMO.

The Coast Guard also serves as a member of the U.S. delegation to the ILO during discussions of maritime labor issues. The most recent ILO negotiations led to the development of the Maritime Labor Convention (MLC) 2006, where the Coast Guard provided the technical expertise for the U.S. delegation. The ILO MLC 2006 consolidated 68 maritime labor instruments, recommendations, and conventions, into a comprehensive set of global standards. The adoption of the ILO MLC 2006 triggered the harmonization of IMO and ILO maritime personnel-related Conventions. The IMO comprehensive review of the STCW Convention will include the harmonization with the ILO MLC, 2006 on a number of issues, such as training, medical certificates, and hours of work and rest.

Improvements to the credentialing and licensing program

For the past 12 months, the Coast Guard has been proceeding with its project to restructure and centralize the Marine Licensing and Documentation program. Since June, the NMC has been focused on improving its internal customer service processes to issue mariner licenses and documents faster and with a higher degree of accuracy and consistency. Through the introduction of key performance and processing metrics, the NMC identified bottlenecks in the application processing system and focused efforts and resources on those areas identified as constraining the system.

The Coast Guard is managing a project to centralize and restructure the Mariner Licensing and Documentation (MLD) program. By centralizing the evaluation process, the mariner will benefit in the following ways:

- Decreasing Processing Time
The Coast Guard currently has 17 Regional Examination Centers (RECs) which maintain different processes for issuing credentials. Centralization of this process will allow the Coast Guard to substantially decrease the time it takes to process an application. Having all evaluation resources located and managed centrally will allow quick reallocation of those resources in response to changing demands. In this way, the Coast Guard can greatly reduce in-process work to be ready for new work. Recent information technology changes now enable National Maritime Center leadership to measure program-wide processing times by credential type to identify process inefficiencies in need of improvement. Several concurrent improvement projects are in-progress to address both short-term and long-term objectives.
- Consistency of Service
Through centralizing evaluators, the Coast Guard can assure consistency while blending and maintaining our evaluator expertise through cross-training and formal and informal knowledge sharing. To date, the entire program has seen a 19% improvement in consistency of processing time between the fourth quarter of 2006 and the first quarter of 2007, with overall times trending down.
- Improved Customer Service
Centralizing creates economies of scale and process consistencies which make it possible for mariners to check the status of their credential application online via a Coast Guard website; <http://homeport.uscg.mil/>. (From the home page, select [Missions](#) > [Merchant Mariners](#) > Merchant Mariner Application Status). A new toll free call center is also available (1-888-IASKNMC / 1-888-427-5662) to answer questions and provide information.

In August, as a result of process improvements, the NMC reduced the inventory of credential applications being processed by 39% and issued over 2,000 mariner credentials, reaching a new production record. While the overall processing time remains higher than desired, the average license renewal processing time has decreased by 25% since June. Many of the processing delays involve time spent waiting to obtain information missing from the mariner's application. To address this, we have implemented changes to the evaluation process and the application forms to make it easier for mariners to submit a "ready for evaluation" application, thus reducing processing time. Regional Exam Center staff will also remain available to assist the mariners to ensure that their application packages are ready.

The Coast Guard also recently published an Notice of Proposed Rulemaking (NPRM), followed by an Supplemental Notice of Proposed Rulemaking (SNPRM), proposing to consolidate the current license, MMD, certificate of registry and STCW certificate into a single combined "Merchant Mariner Credential" (MMC). The MMC will enable mariners to carry a single document, instead of numerous separate documents, containing all of their qualifications. The passport style MMC has been strongly endorsed by MERPAC as something which will make life easier for mariners

Future improvements that will benefit merchant mariners

The recent Coast Guard report to Congress, “*Enhancing the Coast Guard’s Marine Safety Program*,” includes recommendations which will have a positive impact on mariner training and recruitment. The following recommendations will benefit the merchant mariners:

- Expedite regulatory implementation. Act on MERPAC or industry recommendations related to Maritime training within the regulatory process in a more expedient manner.
- Improve mariner credentialing through greater efficiency, transparency and capacity, by continuing to improve processes and by utilizing technological advances. The Coast Guard is planning to significantly increase support at the NMC and Sector Regional Examination Centers to improve service delivery. These improvements would allow the Coast Guard to process applications and approve courses in compliance with the domestic and international requirements in a more expedient manner.
- Increase the accession of maritime graduates from the U.S. Merchant Marine Academy and the state maritime academies in support of the Maritime Safety mission.
- Expand Outreach and Advisory Mechanisms for Industry and Communities. The Coast Guard would further open the lines of communication with training providers, mariners and other industry groups to further maritime training and education, while ensuring that mariners are duly qualified.

The Coast Guard’s proposed Authorization Act for Fiscal Year 2008 also includes various provisions which, if enacted into law, will benefit mariners. The Coast Guard proposal includes creating a new federal advisory committee called the “Merchant Marine Medical Advisory Committee” (MMMAC), comprised of maritime medical professionals and working mariners, to advise the Coast Guard on matters related to the medical and physical qualifications of merchant mariners.

The proposal includes a provision authorizing the Coast Guard to extend the duration of merchant mariner credentials in times of emergency, such as hurricanes. The proposal also includes a provision to modernize mariner recordkeeping requirements and authorize the Coast Guard to promulgate regulations requiring employers to maintain sea service records for at least 5 years after completion of the mariner’s service.

Finally, the proposal seeks the deletion of the exemption in 46 USC 8905(b) which allows certain towing vessels engaged in the offshore mineral and oil trade to be operated by an unlicensed operator. Deletion of this exemption will require these vessels to be operated by a properly licensed individual improving safety and security in offshore waters.

CONCLUSION

The Coast Guard believes that STCW has significantly enhanced the safety and security of the United States by requiring foreign vessels calling in our waters to be manned with competent crews, and by providing port state control authority to take appropriate action against vessels which do not meet these internationally recognized standards.

Along with this benefit, the Coast Guard also recognizes implementation of the requirements of the STCW Convention for U.S. merchant marine vessels imposed a financial burden on our mariners, and we are taking positive steps to reduce that burden.

The Coast Guard is examining methods which may potentially reduce some of the challenges associated with implementation of the STCW requirements. We will continue to utilize our strong partnerships with other agencies, such as MARAD, and industry, to address the challenges associated with STCW. Our goal of this cooperative examination of the current processes of training and development is to reduce the burden on the mariner while ensuring safe, security, and environmentally sound maritime operations.

Thank you for this opportunity to discuss maritime education and workforce. I will be pleased to answer any questions you may have.