# Proceedings of the Marine Safety Council 



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Introduction

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## 288 Keynotes

This special issue of Proceedings is devoted to CGD 81-059 and CGD-81-059a, supplementary notices of proposed rulemaking regarding licensing of personnel. Readers are urged to examine this material and, if so desired, to provide comments to the U.S. Coast Guard on these notices. The address for comments appears on page 259.

## Introduction

This month's issue of Proceedings is devoted to CGD 81-059, a Coast Guard proposal to amend the regulations pertaining to licensing of officers and manning of vessels, and to CGD $81-059 a$, which is concerned with the licensing of officers on mobile offshore drilling units (MODUs).

An Advance Notice of Proposed Rulemaking (ANPRM) for CG 81-059 was originally published on October 29, 1981, in Volume 46 of the Federal Register, pages 53624-53627. After reviewing comments received on the ANPRM, the Coast Guard published a Notice of Proposed Rulemaking (NPRM) in 48 FR 35920 on August 8, 1983. The Coast Guard has now completed its review of comments on the NPRM and has made significant changes in the proposal on the basis of these comments.

Your participation in this rulemaking is highly desired. The Coast Guard will hold public hearings, as listed below:

## January 8, 1986

Federal Building, North Auditorium, 4th floor, 915 Second Avenue, Seattle, Washington

January 15, 1986
Ramada Inn, Downtown, 1732 Canal Street, New Orleans, Louisiana

January 22, 1986
FAA Headquarters Building Auditorium, 800 Independence Avenue, SW, Washington, DC

January 29, 1986
Ramada Inn, Hobby Airport West, Rooms 1 and 2, 7777 Airport Blvd., Houston, Texas

## February 5, 1986

Coast Guard Support Center, New York, Base Theater, Governor's Island, New York

All hearings will begin at 10:30 a.m. and end at 4:00 p.m. or whenever all comments have been heard, whichever occurs first.

Attendance is open to the public. Persons wishing to present oral statements at the hearings should notify the Executive Secretary of the Marine Safety Council, U.S. Coast Guard, no later than 3 days before the hearing of the item toward which comments will be directed. Written comments may be submitted at any time before the end of the comment period. In order to assure orderly presentations and accurate records, comments will be received on Licensing of Maritime Personnel (CGD 81-059) first. When all comments have been received on this notice of proposed rulemaking, comments will be received on Licensing of Operators for Mobile Offshore Drilling Units (CGD 81-059a). Due to the expected volume of comments, the Coast Guard encourages the submission of written copies of presentations and reserves the right to limit the length of oral presentations.

Written comments on the proposal are particularly invited and should be submitted to the following address by February 21, 1986:

Executive Secretary<br>Marine Safety Council (G-CMC)<br>U.S. Coast Guard<br>2100 Second Street, SW<br>Washington, DC 20593

If you desire more information on the Notice, the "Address" section on page 260 of this magazine will direct you to the specific Coast Guard office that can answer your questions.

## NOTE

Readers are advised that our regular "Keynotes" feature appears at the end of this magazine. All other articles and features, including the index of articles published in Proceedings during 1985, will be printed in next month's issue.

# CGD 81-059 <br> Licensing of Maritime Personnel 

## Summary

The Coast Guard is changing its original proposal (48 CFR 35920) of August 8, 1983, to amend the regulations concerning the licensing of individuals and the registration of staff officers. The proposal will simplify the license structures for ocean and inland service, delete many of the trade-restricted licenses, and simplify the license procedures by redesigning the format of the regulations and adding easy reference tables. The charts, tables, and flow diagrams included in the proposed regulations contain clear and concise guidelines for someone entering the Merchant Marine at any level or for the experienced mariner upgrading a license. The present list of licenses (over 100) and examinations (over 80) create a confusing structure in which to plan a career. Special considerations, such as inspected versus uninspected vessels, tonnage, routes, the vessel's trade, propulsion mode, and horsepower limits result in artificial and unnecessary restrictions to a mariner's advancement. The proposed amendments revise the regulations in 46 CFR Part 10, modify the regulations for licensing personnel on small passenger vessels, and relocate the regulations from Part 187 to Part 10. Furthermore, these proposed amendments revise Part 157 to reflect technological developments,
the recodification of Title 46 United States Code, and changes in terminology associated with merchant marine personnel. Part 157 is also relocated to Part 15 for convenience.

In addition to the amendments to licensing and manning regulations, many changes have been proposed for Parts 175 and 185 to conform with the terminology, i.e., master and mate versus operator and ocean operator.

## Date

Comments must be received by February 21, 1986. The dates, times, and locations of planned public hearings are listed in the Introduction of this magazine, page 259.

## Address

Comments should be submitted to the following address:

Executive Secretary Marine Safety Council (G-CMC/21)<br>CGD 81-059<br>U.S. Coast Guard<br>Washington, DC 20593

Between 8:00 a.m. and 4:00 p.m. Monday through Friday, comments may be delivered to and will be available for inspection or copying at the Marine Safety Council (G-

CMC/21), Room 2110, U.S. Coast Guard Headquarters, 2100 Second Street SW, Washington, DC 20593, phone (202) 426-1477.

For further information, contact CDR George N. Naccara, Project Manager, Office of Merchant Marine Safety (GMVP), phone (202) 426-2240.

## Supplementary Information

Interested persons are invited to participate in this rulemaking by submitting written data, views, or arguments. Comments should include the name and address of the commenter, the identification number of this Notice (CGD 81-059), the specific section of the proposal to which the comment applies, and the reasons for the comment. All comments received before expiration of the comment period will be considered before final action is taken on this proposal.

## Background

This proposal will implement provisions of Public Law 96-378 and the Port and Tanker Safety Act of 1978. Further, a licensing scheme that conforms to provisions of the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW, 1978) will be established. Public

Law 96-378 discussed the establishment of suitable career patterns, service and qualifying requirements, and substitution of training time and courses of instruction for sea service on deck or in the engine department. The Port and Tanker Safety Act of 1978 required improved pilotage standards, qualification for licenses by the use of simulators, minimum health and physical fitness criteria, and periodic retraining and special training for upgrading positions. The STCW Convention entered into force internationally in April 1984, but the United States has not yet ratified it. Many serious concerns were expressed in the comments to the docket regarding this Convention. The Coast Guard supports the intent of the Convention and, with this Supplemental Notice, hopes to allay industry's fears and promote ratification. Public Law 98-89 of August 20, 1983 revised and consolidated certain laws relating to vessels and seamen contained in Title 46, United States Code. These changes also necessitated certain amendments to our licensing regulations. The Coast Guard also plans to revise the licensing regulations purely from an administrative view.

The Coast Guard published an Advance Notice of Proposed Rulemaking (ANPRM) concerning these amendments on October 29, 1981, in Volume 46, FR 5362453627. Seventy-two written comments were received in response to the ANPRM and were discussed in the original Notice of Proposed Rulemaking. Private individuals, maritime attorneys, commercial enterprises, maritime unions, industry associations, state marine agencies, federal agencies, and state and fede-
ral maritime schools submitted comments to the docket. The Notice of Proposed Rulemaking was published on August 8,1983 , in 48 FR 35920, and 693 comments were received. The Coast Guard has reviewed the proposed rule in light of those comments and is now proposing significant changes.

A key issue in the original Notice of Proposed Rulemaking was the inclusion of the International Convention on the Standards of Training, Certification, and Watchkeeping for Seafarers, 1978, (STCW). The Coast Guard attempted to minimize the impact of the Convention by harmonizing most of our Coast Guard regulations with the STCW requirements. Our attempt was one of facilitating industry compliance with this Convention so that U.S. vessels in foreign trade will not encounter problems in sailing to ports of signatory nations. The overwhelming reaction received in public meetings and in the comments to the docket was strongly against the STCW-imposed service requirements and many other, more subtle changes to our existing licensing regulations. Therefore, industry clearly indicated that facilitation is not desired for the Convention. Unfortunately, this rejection of STCW was often based on misconceptions or misperceptions of our regulatory intentions. Specifically, reducing the number of license exams in the unlimited category was not STCW-mandated; rather, it was an internal decision. Another exam has been added in this Notice at the master and chief engineer license levels. The discussion of celestial navigation in deck officer exams came about from the numerous suggestions of licensed officers and training
schools rather than from statements or implications by STCW. This Notice contains, in the opinion of the Coast Guard, satisfactory and acceptable solutions to the constraints of the STCW Convention, and, importantly, to the concerns and the needs of the U.S. Merchant Marine. Therefore, the purposes of the Supplemental Notice are to (1) provide the public another opportunity to review and comment on the numerous revisions and improvements to the original Notice and (2) remove the problems and the reluctance of certain segments of industry concerning the impact of the STCW Convention and allow for U.S. ratification of that Convention.

## Discussion of Comments

It was very encouraging to note the quality and constructive criticism in most of the comments. Although some comments were limited to the specific circumstances involving an individual's license and what would happen to that license in the new system, most people addressed general areas of concern in the proposal. Many comments also contained alternative suggestions.

In this proposal, the comments are organized and discussed under specific topics along with the proposed changes. The paragraphs are numbered, and the key issue to be discussed is shown as the paragraph heading. The supplemental proposal also contains license structure charts for all licenses. Minor changes were necessary to the charts based on the comments; however, the structure charts will still indicate career patterns, license progressions, experience requirements, and references in the proposed
regulations which describe each license.

The section of Part 10 (Subpart 10.700), which addresses the licensing of pilots, is not included in this Notice. This subject is addressed in a separate regulatory project (CGD 77-084), Licensing of Pilots - Manning of Vessels.

## Specific Comment Areas

## 1. Public Hearings

Many commenters requested public hearings on this proposal, and five hearings have been scheduled. The Coast Guard has made intensive efforts to bring this proposal to the attention of affected parties. We distributed nearly 10,000 copies of the proposal wth two pages of highlights and a cover sheet encouraging public response. We supplied copies of the proposal to maritime unions, trade associations, our Re gional Examination Centers, to over 1,500 people on a licensing mailing list, and to the general public where interest was shown. Numerous media sources were also supplied the information for printing in over 3,000 trade journals, newspapers, and magazines. We also sent press releases to organizations with access to over 20,000 addresses on the boating safety mailing list. Furthermore, the Coast Guard participated in 19 public meetings and conference calls to explain the proposal. In these public meetings, the requesting groups were required by the Coast Guard to publicize the meeting. Consequently, labor organizations, businesses, and the general public have all benefited from the open meetings. At these meetings, the Coast Guard explained the intent of the proposal and responded to
specific questions concerning the applicability and probable impact of the regulations on individuals with different and varying backgrounds. The success of these informational meetings was reflected in the improved quality of comments received to the docket, resulting in informed opinions rather than comments based on misunderstanding. However, the comments to the docket clearly supported and demanded public hearings; therefore, they are scheduled as previously mentioned.

## 2. Supplemental Notice

Many commenters requested that a Supplemental Notice of Proposed Rulemaking be published. Due to the many modifications to the proposal and the revised and flexible approach to the implementation of the STCW Convention, this Supplemental Notice is published with another open comment period and public hearings.

## 3. STCW Provision

Many commenters opposed the use of any STCW requirements in our licensing system. It was felt that a convention which is not ratified by the United States should not have any impact on our established licensing system. While it is still true that the Convention has not been ratified by the United States, STCW came into effect internationally in April 1984. The Coast Guard supports the STCW and agrees with its intent and purposes. As previously mentioned, the misperception of STCW's impact on the licensing proposal of August 1983 resulted in many negative comments.

As a result of review and comments, the impact of the Convention on this proposal is as follows:

1. Firefighting training will be required for licensed officers (although this training requirement has been considered and supported previously.)
2. Minor changes will be made to license renewal procedures, which, in this Notice, are quite similar to present requirements.
3. The Designated Duty Engineer license is established in this proposal. This is is a title which satisfies the Convention, meets Coast Guard licensing standards, and causes very little impact on industry.
4. Tonnage categories are established at 200, 500, 1,600 , and unlimited gross tons.
5. We have included a detailed listing of topics for every license examination, including a new topic, "Basic Principles To Be Observed in Keeping a Navigational/Engineering Watch."

## 4. Retain High Standards

As expressed in the comments, many people felt that the U.S. licensing regulations were the best in the world and that many of the proposed changes would weaken the system. Certainly, the Coast Guard agrees that our standards are among the best in the world. It was never our intention to compromise the high standards of our licensing system or to lower the qualifications to obtain a U.S. license. Many of the changes in this Supplemental Notice resulted from the comments to
the docket on particular items which were perceived as weakening our system.

## 5. "Significance" of the Proposal

Many comments stated that the proposed licensing changes were not "nonsignificant" and that they should indeed be significant in any definition of the word as far as their impact on our licensing system. The Coast Guard is aware of and is sensitive to the impact of this rule on the lives of licensed officers. We categorized the original proposal as nonsignificant and of minimal impact only within the definitional context of Executive Order 12291 and Department of Transportation Order 2100.5. However, due to the substantial public interest shown, the Coast Guard and the Department of Transportation have classified this proposal as "significant."

## 6. Celestial Navigation

Over 200 commenters felt that the celestial navigation parts of the examinations for deck officers should remain as they are presently. In the Notice of Proposed Rulemaking, the Coast Guard attempted to stimulate interest and feedback from the public concerning celestial navigation on the examination. We never considered totally removing celestial navigation from any license exam. The overwhelming response in the comments was to keep celestial navigation in its entirety. A percentage of commenters also felt that we should expand the electronic navigation aids and nautical astronomy sections. The Coast Guard agrees and will add questions
to the deep-sea deck licensing examinations.

## 7. License Examination Structure

Over 100 commenters felt that the Coast Guard was lowering the standards of our licensing system for the unlimited deep-sea licenses by cutting back from four license exams to two. The Coast Guard's rationale was that the second and third mate and second and third assistant engineer exams are very similar, and another exam at those levels would be redundant. Likewise, the chief mate and master and the first assistant and chief engineer exams are quite similar. We felt that the chief mate and the first assistant engineer should be fully tested on command levels since these individuals should be capable of assuming command responsibilities.
Based on the comments received, the Coast Guard will add another level of examination at the master and chief engineer levels. Rather than being the conventional full examination, the tests for master and chief engineer will be of less duration (four sections, 2 full days of testing) with emphasis on certain command topics. The examination topics are listed in Subpart 10.900.

## 8. Professional Requirements for License Renewal

Many commenters felt that the proposed open-book renewal exercise for deck and engineer licenses would not serve any useful purpose. The exercise could be administered through the mail, which many people felt would certainly lead to compromise. The intent of the open-book renewal exercise would be to maintain
a working familiarity with the skills necessary to work within the industry. We realize, however, that alternatives should be available for those actively sailing on their license or involved in the industry. Therefore, the Coast Guard is proposing alternative requirements for renewal. One would be a 50 -question exercise for deck and engineer licenses requiring a 90 percent passing grade. A second alternative would be to present evidence of 1 year of sea service in the past 5 years. This evidence may be in the form of discharge papers or letters showing service as a deck or engineer officer. Another alternative would be a Coast Guard approved refresher course. The fourth method of renewal would be to accept employment in a shoreside position closely related to the operation of vessels for at least 3 years during the past 5 years. Renewing a deck license in this manner would also entail a rules of the road exercise, similar to that which is presently required.

## 9. Open-Book Renewal Exercise

Many commenters suggested limiting the open-book renewal exercise to rules of the road and pollution prevention questions only. The Coast Guard partially agrees but will also include other questions on safety aspects of the deck and engineer licenses. We prefer to keep the renewal exercise as one of the alternatives for license renewal to at least refamiliarize mariners with their duties. As mentioned before, another alternative is a Coast Guard-approved refresher training course which can be substituted for the renewal exercise or the sea service requirement for renewal.

## Figure 1 Deck License Structure



* Licenses for service on vessels of over 1600 gross tons on near coastal routes parallel this structure for service and tonnage requirements. The examination shall contain all subjects except those inappropriate for routes other than oceans, i.e., celestial navigation, ocean sailing problems, etc, as indicated in subpart 10.900. In order to remove the near coastal route restriction at any level, an additional six months ocean service must be presented and any exam deficiencies completed.



## 10. Physical Examination Required at License Renewal and Raise of Grade

In the recodification of Title 46 of the U.S. Code, the Congress intended to ensure the physical fitness of a licensed individual. Specifically, 46 U.S.C. 7101(c), by mentioning the critical qualifications, implies that this includes license renewals and raises of grade also. Comments to the docket also supported additional physical examination requirements for renewal of all licenses. As most license renewals are presently conducted through the mail, and those applications must be accompanied by a certification from a licensed physician, the impact should be minimal. Furthermore, an applicant for a raise of grade of license who has not had an original or renewal physical examination during the past 3 years must also obtain this statement from a licensed physician. The Coast Guard envisions the future use of the "Guidelines for Physical Examination for Retention of Seafarers in the U.S. Merchant Marine" as proposed by the Seafarers Health Improvement Program (SHIP). SHIP is composed of members from all areas of the maritime community. In the future, a licensed physician may refer to these guidelines in certifying the physical fitness of an applicant for renewal or raise of grade.

## 11. Renewal By Mail

Comments received on the renewal-by-mail topic were very mixed; some people oppose renewal-by-mail procedures in any case. Many people felt that we were weakening the system or allowing possible compromises
by allowing renewal by mail. Many commenters felt we would not see the applicant, and we could not ensure physical competence or even that the person was still alive to renew the license. Other people were in favor of the renewal-by-mail procedures as they have existed since the Regional Examination Center concept went into effect in 1982. Existing regulations also allowed for renewal by mail in extraordinary circumstances even prior to that time. The Coast Guard feels that renewal by mail should be allowed, and we will continue that policy. We will, however, require a statement by a licensed physician attesting to the fact that the applicant for renewal of a license can satisfactorily perform the duties associated with that license.

## 12. Color Vision Test for Renewal of Licenses

Based on the opinion of various opthamologists and the very rare occurrence of a color deficiency developing or worsening in an applicant, the Coast Guard has decided in this proposal to delete the requirement for deck and engineer officers to pass a colorsense test for license renewal. It is our opinion that the color-sense test is rarely a significant factor in renewals. In a related comment received to the docket, a question was asked concerning applicants who had passed a Williams Lantern test to satisfy original licensing requirements for color sense. As the Coast Guard has deleted the requirement for color-sense testing on renewal, this question is moot.

## 13. Requirement for Pilot License Renewal

The original Notice proposed an additional requirement for renewal of a pilot license - an affidavit attesting to any involvement in reportable marine casualties since the issuance of the current license. Eleven comments were received which opposed this requirement for various, well-articulated reasons. The Coast Guard is still examining this specific proposal and has included the same statement in this Notice.

## 14. Oral or Oral-Assisted Examination

The Coast Guard had proposed oral or oral-assister examinations for all levels of licenses. Over 100 commenters opposed any type of oral examinations for any licenses. Some commenters suggested oral examinations only for very limited licenses, such as those of 500 gross tons or less. The Coast Guard agrees with those comments and, as in present policy, will allow oral exams for these limited licenses only. The applicants must present the required service and qualifications and recommendations from their employer(s). The requirement to first attempt the written exam will not be continued; however, the applicant must demonstrate that he or she has difficulty in understanding and answering written questions. The license will be issued with tonnage, trade, and route limitations. To remove the limitations, the required written exam must be satisfactorily completed.

## 15. Dividing Line for Inland and Near-Coastal Licenses

Many commenters suggested the use of the COLREGS lines as an appropriate line of delineation between inland and near-coastal licenses. These lines would permit a logical separation of examination material between those applicants for inland licenses and those applicants whose licenses would require the international rules; therefore, the Coast Guard is adopting the COLREGS lines for licensing limits. Although there are certain parts of the country which would face a problem in using these COLREGS lines, such as Puget Sound and the New England coast, exceptions will be noted in the text to solve those situations. Furthermore, the limits of authority for the radar observer endorsement would be consistent with the COLREGS delineation for specific waters.

## 16. Routes for Uninspected Towing Vessel Licenses

Many commenters suggested retaining the ocean route for the uninspected towing vessel license. The "operator" license, unfortunately, is not an accepted title in the STCW Convention when sailing internationally. Solutions contained in this Notice will greatly simplify the progressions and even encourage the towboat operator to obtain the limited master's license. With certain training requirements, an additional 6 months of offshore service, and by making up any exam deficiencies (which will be minimal), the operator may obtain a master 500 gross ton license upon oceans.

## 17. First Aid and CPR Requirements

Over 40 commenters requested that the Coast Guard retain the requirements for first aid and cardiopulmonary resuscitation (CPR) training and certification for licensing. Our present regulations require this training and the presentation of the cards or certificates for original licenses only. Based on the comments received, we are retaining this requirement for original licenses in this Notice. We do not intend to require recertification for this type of training in our license regulations for renewal. These requirements were not extended to licenses of 200 gross tons or less, although some comments supported that. Comments are requested concerning the need for first aid/CPR training on vessels of 200 gross tons or less in inland or offshore service.

## 18. Firefighting Training

Many commenters were in favor of the firefighting training requirement for licenses. In fact, some of the comments were in favor of training for inland as well as offshore licenses. However, the Coast Guard continues to propose firefighting training for deck officers on all vessels over 200 gross tons only in ocean or near-coastal service or engineer officers on vessels of over 1,000 horsepower in only ocean or near-coastal service. We have not extended the requirement to inland service or to vessels of up to 200 gross tons or 1,000 horsepower; however, we request comments concerning this possibility.

Some commenters were concerned that we may require a type of training -firefighting, for example -when the training facilities are not readily available to the public. The Coast Guard has thus far granted interim approval to six firefighting training institutions offering both classroom and field experience. We know of other institutions which either have partial approvals or are planning for Coast Guard approval for fire fighting training. In any case, when the final rules are to go into effect, we would evaluate the available firefighting training considering the number of licensed people who would be affected by that decision. The Coast Guard will require that officers complete the basic and advanced firefighting courses (either combined or separately) and that unlicensed personnel must have attended a basic firefighting course. The IMO resolution which discussed firefighting training makes a distinction on the topics and curricula taught for each of those levels of training.

We do not envision a requirement for firefighting renewal training. We prefer the one-time training prior to original license issuance with vigorous follow-up by shipboard drills and instructions.

## 19. License Transition for Operators and Ocean Operators

Many commenters suggested that the Coast Guard allow operators and ocean operators to automatically convert their licenses to the master 200 gross tons license in the new system. Some commenters suggested an additional service requirement of

3 to 5 years. The Coast Guard feels that may be excessive for a service requirement, but we do feel the concept is worthwhile and will enhance career opportunities for the individual. In this proposal, we will allow license holders who have accumulated at least 3 years' total service on vessels of over 50 gross tons to convert to a master 200 gross ton license upon near-coastal waters in the new system. Furthermore, if the applicant has sufficient service on vessels of 50 gross tons or over and completes certain training requirements (firefighting, radar observer, lifeboatman, and able seaman requirements), the license may be extended to an ocean route. An additional exam must be completed for celestial navigation. The applicant also has the option of increasing the scope of the license to 500 gross tons by completing that particular master license examination.

## 20. Training as Substitution of Service

There were many mixed comments concerning the Coast Guard's acceptance of shore-based experience or simulator training for licenses. Many commenters opposed the substitution of shore-based training or simulator training because they felt that only sea service is the desired qualification for license and that nothing can substitute for underway service. The Coast Guard's proposal accepts shore experience, training, or simulator training only as a partial substitution for required underway service. The ratio of substituted service will vary according to the quality, length, and level of sophistication of the course. Simulator training specifically must be part of a Coast Guard-
approved training course. The Coast Guard's approval procedure requires initial and periodic review of the training course; evaluation of the facility, instructors, and curricula; and will also provide a measure of control for the graduates of that training course. In no case will simulator training itself be purely accepted in lieu of underway service. It must be part of the approved training course and will be evaluated in that regard. The Coast Guard does feel that simulator training and other shore-based training are very valuable methods of preparing a mariner for a job assignment and are certainly effective in retraining a mariner.

## 21. Requirement for Mate 200 Gross Tons

Over 50 commenters requested a discussion of the requirements for the mate position aboard vessels from 0 to 200 gross tons. In the proposal of August 1983, the requirements had been discussed in regard to licensing and manning sections. From the comments, it was obvious that people interpreted our discussion to imply a requirement for an additional person on many small passenger vessels. This is not the Coast Guard's intent, and we have clarified that position in this proposal. Our current policy of requiring the additional operator (mate) on vessels on a voyage over 12 hours in length will continue and is clearly stated in the licensing and manning sections of this proposal.

## 22. Additional Credit for 12-Hour Workday

Many comments were received on this item, some supporting and some opposing
this policy. The Coast Guard feels that personnel who are serving on vessels authorized a two-watch system should be given credit for that additional watchstanding service. It has been our longstanding policy to allow time-and-a-half credit for 12 -hour days where the time has been spent in a 6on and 6 -off watch system. The additional credit would not be allowed for personnel standing overtime or additional daywork duties. Furthermore, the Officer in Charge, Marine Inspection (OCMI) will evaluate service with evidence of 12-hour workdays.

## 23. Credit for Instructor Time and Shore Experience

The discussion in the original proposal on this topic formalized Coast Guard policies which have been in effect for many years. Over 25 comments were received on this topic, and they were divided equally for and against substitution of service for this type of experience. In this proposal, the Coast Guard will keep this policy in effect. There are maximum amounts of time acceptable by substitution of instructor time and shore experience in a related industry. This credit will be allowed for original licenses and raises of grade. Furthermore, in a related topic, many commenters requested credit for port captain time similar to that proposed for port engineer experience. The Coast Guard agrees with these comments and will accept a certain amount of time as port captain as a substitution for underway sea service.

## 24. Tonnage Convention

Ten commenters requested a discussion on the 1969 Tonnage Convention im-
pact on the licensing regulations. In the Notice of August 1983, we briefly mentioned that the effect of the Tonnage Convention would probably result in higher vessel gross tonnages from measurement under the Convention. We assumed that the proposed tonnage categories will resolve most problems in that the primary vessels affected will remain in the 200 to 1,600 gross tons category. When and if the Tonnage Convention, the implementing legislation, and regulations come into effect, we will make every attempt to allow the seaman to continue to operate on those vessels where he or she is presently employed. That may require specific tonnage endorsements on each individual license, or it may require conversion to licenses in the new system. In either case, the seaman will not be penalized by the effects of differing tonnage as calculated under the International Tonnage Convention system, the standard register tonnage system, or the new regulatory tonnage.

## 25. Creditable Time in Other Departments

Of the 14 comments received discussing this topic, most opposed crediting time spent in other departments. For example, an amount of engineering service credit may be accepted toward a deck license or vice versa. The Coast Guard feels there is some merit in accepting some time in other departments toward licenses. It is to the advantage of the seamen and the vessel operator to have a licensee at least basically familiar with all vessel operations. This also promotes cross-training of individuals when entering the merchant marine. Individuals who may
be undecided as to where their interests lie would not be penalized by missing the credit for that cross-over training. The Coast Guard will continue to accept a minimum of time toward deck and engineer licenses for this type of experience.

## 26. Military Service Credit

Although most comments opposed the crediting of military sea experience for conventional merchant marine sea service, the Coast Guard feels that a percentage of military sea time is equivalent and creditable for sea service toward a merchant marine license. This has been Coast Guard policy for many years, and we elect to continue this policy.

## 27. Mobile Offshore Unit Regulations

All comments received to the docket concerning mobile offshore unit regulations favored a separate section and a separate Supplemental Notice for this particular topic. The Coast Guard agrees and will prepare a separate rulemaking for the licensing of personnel on mobile offshore drilling units. The manning requirements and any training and qualification specifics will also be addressed in this separate rulemaking. It is our intent to publish those proposed rules in late 1985.

## 28. Methods of Publicity for the Notice

Many commenters were concerned with the methods the Coast Guard used to publicize the Notice of Proposed Rulemaking. Many people alleged that our methods were inefficient and did not allow
license holders sufficient time to analyze the proposal properly. In fact, many commenters suggested mailing copies of the proposal to all license holders in our files. The Coast Guard considered this approach, but since there are over $1,300,000$ names of licensed personnel in the Headquarters' files, this is not economically feasible. The Coast Guard distributed nearly 10,000 copies of the proposal with two pages of highlights and a cover sheet encouraging public response. We supplied copies of the proposal to maritime unions, associations, our Regional Examination Centers, to over 1,500 people on a licensing mailing list, and to the general public where interest was shown. Numerous media sources were also supplied the information for printing in trade journals, newspapers, magazines, etc. Furthermore, the Coast Guard participated in 19 public meetings and conference calls sponsored by various industry associations. The Coast Guard chose to use public meetings rather than public hearings because, based on comments received to the docket for the Advance Notice and initial response to the Notice, we felt that clarification and presentation of information were necessary for the public to understand this massive proposal. Unlike public hearings, public meetings do not require advance notice in the Federal Register. This flexibility allowed the project manager to visit every part of the country and address virtually any group requesting information. At these public meetings, the project manager has been responsive to specific questions concerning the overall applicability and probable impact of the regulations on individuals with different and varying
backgrounds. An accurate reflection of this success was the improvement in quality of the comments submitted to the docket. The obvious level of knowledge about the proposal which resulted from this method of public information allowed people to express an informed opinion rather than a comment based on a misunderstanding. The Coast Guard also extended the public comment period from the original December 1983 closing date through March 1984 to further allow the public more time to evaluate the proposal. This supplemental proposal will be distributed to our mailing list and to all of the media sources available. It is our intention to involve the public as much as possible in this rulemaking, and we will make every attempt to make the information available to all affected personnel.

## 29. Great Lakes Licenses

Many commenters suggested that the present Great Lakes licensing and pilotage system should be retained. The Notice of August 1983 proposed moving the Great Lakes licenses into the nearcoastal category, limiting the pilot licenses to harbors and rivers, and that the open waters of the Great Lakes would be nonpilotage waters. The Coast Guard also proposed a four-rank structure for Great Lakes licenses within the near-coastal category. All comments received on this topic have rejected this proposal; therefore, the Coast Guard is revising the proposal in that regard. In this proposal, licenses for master Great Lakes, mate Great Lakes, and first class pilot are retained. This structure is basically similar to the present licensing system and will
allow industry the flexibility which it felt necessary for its unique area. The title of the deck license is expanded to "Great Lakes and Inland waters" for all tonnage categories. The master on inland waters license will still remain; however, that license will not include the Great Lakes in the unlimited tonnage category. The Great Lakes and inland waters are included in the 1,600 gross ton and 200 gross ton license categories. Cross-overs are being proposed from the Great Lakes to offshore licenses (nearcoastal) and vice versa. For the 200 gross ton category on inland waters, which will include the Great Lakes, the proposal will allow the small passenger vessel operator converting to the master's license to obtain a license in 1 year, as is presently the case.

## 30. General Concurrence with the Proposal

The Coast Guard has decided to go forward with this rulemaking because so many of the comments indicated general concurrence with its overall intent. However, the need for the Supplemental Notice is undeniable. There are numerous changes, not only in content, but also in philosophy. Changes to the proposal resulting from the comments will restore much of the present licensing system's basic characteristics, but the regulations will be simplified and streamlined.

## 31. License Reexamination Cycle

The 22 comments received on this topic were split evenly in opposing or supporting the new reexamination cycle. The Coast Guard intends to continue that cycle as
proposed previously. In fact, this reexamination system has been used at our Regional Examination Centers for over a year with much success. Certain modifications may be necessary to the time delays between failures; however, we must retain flexibility in the system. The Coast Guard does not intend to return to the old reexamination system that had been in place. We are convinced that system is neither effective nor economically efficient for the mariner. Furthermore, we do not feel that the new proposed reexamination cycle compromises the examination purpose.

## 32. Creditable Service on Integrated Tug-Barge Units

The initial proposal, which just restated Coast Guard policy in the regulations, denied the master or towboat operator on a dualmode, integrated tug-barge any tonnage credit except for that of the towboat. The master on the integrated tugbarge, push-only mode, would get full credit for the tonnage of the barge and the tugboat. Although many commenters supported full credit for all experience on integrated tugbarges on either the dualmode or the push-mode units, the Coast Guard does not agree with that opinion. Other considerations are the typical watchstanding on the bridge of that vesssel in the dual-mode, integrated tugbarge, the construction of the vessel, the firefighting and lifesaving equipment on that vessel, and the type of license required on that vessel, which would not be a master or mate. These factors compel the Coast Guard to deny the acceptance of that service with full combined tonnage of the tug and barge.

## 33. License Examinations at Cross-Overs

Many commenters supported the requirement for a full license examination at any cross-over from one tonnage category to another or from one route to another. The Coast Guard agrees with that suggestion and will require full examinations at all crossovers for deck and engineer licenses that increase the scope of the license. In the case of a cross-over from a license with higher tonnage limits or broader routes, moving from left to right on the license structure figures, a partial examination would be required. As an example, a second mate unlimited who attempts to obtain the master 1,600 gross ton license would be required to complete a partial examination in those topics not included in the third (or second) mate (entry-level) examination. The master 1,600 gross ton crossing over to the unlimited category at the second mate level would be required to take a complete third mate examination. The same situation exists in the case of the designated duty engineer crossing over to the second or third assistant engineer unlimited.

## 34. License Application Evaluation

Many commenters felt the evaluation of all license applications whether for physical evaluation, foreign service evaluation, or military service should remain at Coast Guard Headquarters. The argument made by the commenters was that people would shop around for the most advantageous evaluation in each Regional Examination Center. The Coast Guard partially agrees with that suggestion.

We intend to continue publishing more specific guidelines to increase the efficiency of local evaluations in all respects. However, the final evaluation for military service and physical waivers will remain a responsibility of the Merchant Personnel Division in Coast Guard Headquarters. Other new policies contained in the original proposal have been retained. They will speed up the licensing process for entry into the merchant marine at various license levels, including radio officer, staff officer, and many other licenses.

## 35. Service Requirements for Crossing Over to Higher Tonnage Licenses

Commenters suggested that the Coast Guard should not require a person crossing over from one tonnage category to a higher tonnage category to revert to an unlicensed position to obtain the proper tonnage service necessary for that license. As an example, from the 200 gross ton category to the 1,600 gross ton category, we had proposed that at least 50 percent of service must be obtained on vessels over 200 gross tons. This would require a master 200 gross tons to revert to an unlicensed position on the larger vessels to obtain the required service. The Coast Guard agrees with the comments and will allow direct cross-overs from the 1,600 gross ton category to the unlimited category without meeting specified tonnage service. The person advancing from the entry level must still have service on specified tonnage vessels. Major modifications to the license progression offshore from 200 to 500 to 1,600 gross tons have also simplified and enhanced
this career pattern. The Coast Guard feels this is a valid progression due to the fact that the person advancing from one tonnage category to another has obtained quality experience as a limited master or engineer in charge. Although experience may have been on a smaller tonnage or horsepower vessel, this is still command and watchstanding experience with higher levels of responsibility.

## 36. Service Required for Unlimited Licenses

Comments were received which suggested a requirement for all service necessary for unlimited licenses to be obtained on vessels over 1,600 gross tons. In present regulations, the implicit requirement for service on vessels of over 1,000 gross tons is present for all unlimited licenses. The Coast Guard prefers to allow an a mount of service on vessels of under 1,600 gross tons. This will promote a career progression and transition to the unlimited license scheme. However, we will not consider anything more than 50 percent of the service required for original or raise in grade to be obtained on vessels of less than 1,600 gross tons. This problem was discussed in detail in letters from the Military Sealift Command (MSC) where there were a number of vessels between 1,000 and 1,600 gross tons. The MSC felt that the requirement to obtain at least 50 percent of an individual's service over 1,600 gross tons would inhibit those officers from serving in the MSC. Previously, the Coast Guard had required all service on vessels over 1,000 gross tons for unlimited licenses. Service on those MSC vessels between 500 and 1,000
gross tons was not accepted as creditable service. In this proposal, the Coast Guard will allow that time to count toward unlimited licenses. Therefore, in one respect we are helping many of the seamen on those vessels. Seafarers on vessels between 1,000 and 1,600 gross tons will have to rotate from that size vessel to the over 1,600 gross ton size to obtain sufficient experience for a raise in grade.

## 37. Offshore Supply Vessel and Mineral and Oil Industry License Holders

Many commenters felt that the identity of those who obtained the offshore supply vessel (OSV) and the mineral
and oil industry licenses by virtue of the open-book exercise through the temporary licensing program should be maintained. The Coast Guard agrees with those comments. Those personnel who initially obtained the OSV licenses, met the full service requirement, and took the full examinations to obtain the mineral and oil industry license with the 300 or 500 ton limitation will automatically convert to the 500 or 1,600 ton license in the new system. Those who did not take the full exam through the temporary licensing program will retain this OSV limitation on their license.

## Figure 2

## Special Deck License Structure



## 38. License Progression from <br> Master 200 Gross Tons to Master 500 Gross Tons

Many commenters supported the career progression which exists in present regulations but was not included in the proposal. This progression allowed an ocean operator with an amount of service to progress to the mineral and oil industry master license with a 500 gross ton limitation. In effect, this path led from a very limited master to a higher tonnage master's license. The Coast Guard agrees with this suggestion. This proposal allows a master 200 gross tons with at least 1 year of service on vessels of over 50 gross tons to be eligible to sit for examination for a master 500 gross ton license. The applicant would be required to meet certain training requirements at this level of license, including firefighting training, radar observer endorsement, lifeboatman, and able seaman qualifications. After obtaining the master 500 gross ton license and an additional 1 year of service as master or mate in that tonnage category under the authority of that license, the 500 gross ton limitation will be extended to 1,600 tons. The normal career progression will still be available from the master 200 gross tons to mate 500 gross tons and mate 1,600 gross tons. An additional year's service as a mate 1,600 gross tons will allow the progression to master 1,600 as had been included in the prior proposal. This will allow the career path which has been used most often in the mineral and oil industry on vessels of less than 500 gross tons.

## 39. Authority of Officer in Charge, Marine Inspection (OCMD)

Many commenters directly and indirectly asked about the authority of the OCMI within the OCMI's zone. The primary concern involved the limits placed on licenses with appropriate reductions in service and examination requirements. In the past, many unique operations in various zones throughout the country, on the rivers, in certain inland ports, and also in offshore and coastal operations warranted special consideration. This authority would continue in the new regulations as the OCMI will still retain that ability to limit a license and the examination as appropriate.
40. Radar Observer Endorsement for 200 Gross Ton Licenses

Some commenters suggested prescribing minimum navigational equipment and rądar operator skill development for vessels under 300 gross tons. These commenters confused the changes to the inland radar observer endorsement training requirement with a weakening of the overall capability of that qualified person. It was not our intent to lessen the qualification standards but rather to emphasize those aspects of a bridge watchstander in inland waters appropriate to the task. Inland service does not normally entail rapid radar plotting, which decreases the emphasis on that aspect. The Coast Guard previously stated that a requirement for the radar observer endorsement on small passenger vessel licenses in near-coastal or inland waters was unnecessary. The equipment is not
required on board those vessels and, therefore, the training cannot be justified. Individuals holding any license have the opportunity to obtain that training and still have their license endorsed as radar observer even if the requirement for such an endorsement does not exist. The Coast Guard encourages personnel serving on vessels where radar is installed, but not required, to obtain the additional training. With the additional route of "oceans" for the master/mate 200 gross ton license, as stated previously, the applicant must also obtain a radar observer endorsement among other training requirements. It is expected that all vessels operating on those offshore routes will have radar installed, and the additional training for the master/mate is justified.

## 41. Cross-Over Charts

Various commenters asked that additional licenses be added to the transition charts and the cross-over charts in the proposal. Those licenses overlooked previously will be added to the transition chart. Additional licenses which have been defined in this proposal will be added to the cross-over charts for career patterns.
The tonnage requirements for cross-overs are specified in the appropriate regulations, and the cross-over charts will reference specific requirements as appropriate. As explained before, any crossover which would increase the scope of a license by virtue of the route or tonnage limitation or trade limitation would require a complete examination. Cross-overs would require partial examination in most cases. One comment included an excellent chart which compared all examina-
tion topics and listed those requirements for cross-overs. The examination topics can be determined from this chart which will be kept on file at all of our Regional Examination Centers. Due to the size and detail of this chart, it is impractical to publish it in the Federal Register.

## 42. Age Requirement for Licenses

Many comments were received concerning the age requirements for licenses. The Coast Guard intends to include all age requirements within Subpart 10.200, "General Requirements," for all licenses. The age requirements will remain essentially the same with the exception of the master near-coastal 200 gross ton license. This person must be 21 years old due to the fact that there is a pilotage requirement for that licensee on all inspected vessels, and the statutory requirement for pilots is a minimum of 21 years of age.

## 43. Engineer License Titles

Some comments were received concerning the license titles for engineers as a possible source of conflict with the STCW Convention. In this proposal, we are introducing a new license title, the "designated duty engineer." The license will require 3 years of service similar to that presently required for the mineral and oil industry engineer license. The designated duty engineer officer may serve on vessels of up to 1,600 gross tons upon oceans and any gross tons in inland waters (other than the Great Lakes) with an unattended or periodically unmanned engine room, and may be the only engineer on the vessel. Regarding the
requirements of the Officers' Competency Certificates Convention, this license will be equated to the "chief engineer"; however, this also satisfies STCW regulations without the additional service requirement of the conventional engineers' licenses.

## 44. Limited Uninspected Towing Vessel Operator Licenses

Commenters suggested modifications on uninspected towing vessel operator licenses for limited operations. For very restricted service, these comments suggested an 18 -month and possibly a 6month operator. The Coast Guard envisions these restricted licenses to be used in lim-
ited inland waters, possibly within a geographical limitation from a dock or base of operations. In agreeing with these concepts, the Coast Guard has added restricted operator licenses for 6 months' service which includes a modified examination appropriate for that service.

## 45. Conversion of Master/Mate Licenses for Uninspected Vessels of Any Gross Tons

Comments were received on this item advocating a stricter tonnage limit when converting a master or mate license on uninspected vessels with an unlimited tonnage to the new system. The Coast Guard agrees with these sug-

## Figure 3

## Engineer License Structure


gestions. In our proposal of August 1983, the alternative was to assign a 5,000 gross ton limitation to the license. In retrospect, that tonnage is excessive for this type of license in most cases. On the basis of the comments received, the Coast Guard proposes in this Notice to convert the master or mate uninspected vessel of any gross tons to a master or mate of vessels of 1,600 gross tons upon ocean waters. If a person presently holding an uninspected license is serving on a vessel of higher tonnage or plans to serve in the near future on an uninspected vessel of higher tonnage and can show evidence of such, the local OCMI may evaluate the case and assign a higher tonnage limitation to the license. In any case, the tonnage on this license cannot be raised to unlimited without progressing through the unlimited tonnage category and passing the required examinations. This conversion aligns more closely with the service requirements as they have been. Current requirements are 4 years' total service to obtain a license as master on uninspected vessels, and the proposal will require 4 years' service for the license as master 1,600 gross tons.

## 46. Citizenship Requirement for Licenses

Comments were received suggesting that noncitizens should be able to obtain licenses. Title 46, U.S. Code 7102 requires that licenses (and certificates of registry) be issued only to citizens of the United States for service on documented vessels. An exception to this rule would be the license as operator of uninspected passenger vessels (previously motorboat operator) which
will be issued with a limitation on its face to undocumented vessels.

## 47. Transition to New Licensing System

Comments were received which asked that the Coast Guard simplify transition to the new system. It was not the Coast Guard's intention to make the procedures difficult. We had to place some constraints on the cross-over due to the numbers of people attempting to obtain new licenses. Some commenters proposed that the Coast Guard allow all people with last names beginning with certain letters to obtain their license in some type of orderly sequence. We felt this was not practical and would be very difficult to administer. We plan to continue the policy which was proposed initially. That policy required a person to convert to the new system upon renewal of license. In addition, if a job opportunity required the new type of license, the applicant could obtain it at any time after the effective date of the regulations.

## 48. Recency Requirements for Military Personnel Obtaining a Merchant Marine License

Comments were mixed regarding the waiver of a recency requirement for military personnel. In fact, many commenters questioned the acceptance of any military service. As we had proposed initially, the recency of service requirement will be established for all licenses as 3 months' experience within the last 36 months. This requirement. will also apply to military personnel. The nature of military service does not justi-
fy a waiver of this requirement, and the necessity to show recent service is an integral requirement of the license qualifications. We will, however, extend a grace period for 1 year after the effective date of the regulations to allow time for military personnel to obtain their original licenses under this new policy.

## 49. Examination Topics

We received many excellent comments concerning license examination topics. Some commenters were quite specific and made additions and deletions to our proposed list of examination topics. Other commenters were more general and suggested either returning to our existing examination topics or deleting any STCW-instigated topics. Some requested more specific information on reference material and sources for the examination questions. Specific examination topic suggestions were received for uninspected towing vessel licenses, for the master and mate 1,600 gross ton license category, and for the mobile offshore unit licenses (which will be included in a separate Supplemental Notice.) Although many of the names or titles of the examination topics have been changed, and in some cases the module titles may change slightly, the Coast Guard does not envision any substantive changes to the present examinations. The length and depth of the exams will remain as they presently exist. In this proposal, we are also specifying those exam topics which are required for command levels in certain cross-over situations. The Coast Guard is adding examinations at the master and chief engineer levels for unlimited licenses
also. The specific topics for those examinations are included in this proposal. The Coast Guard encourages further discussion and comment on topies which should be added, emphasized, or deleted from our suggested list.

## 50. Transition from Limited Licenses to Unlimited Categories

Commenters suggested that a license cross-over from any limited license category to the unlimited licenses should be at the third mate or the third assistant engineer level. The Coast Guard does not agree with that suggestion. The experience gained in a responsible capacity on limited size vessels or on inland waters can be equated to service in the unlimited category on ocean waters to a great extent. The total service requirement from the limited categories will in all cases meet or exceed that required for the unlimited licenses. The Coast Guard also feels that credit should be given to a person standing a watch as a mate or assigned the responsibility as an assistant engineer or a watchstanding engineer, or a limited master or chief engineer. These positions can equate with some degree of similarity to service as a third mate or third assistant engineer in the unlimited categories.

## 51. Boating Safety Courses Accepted in Lieu of Service for Limited Licenses

Commenters suggested that the Coast Guard review and evaluate courses which are proposed to be accepted in lieu of a minimum amount of service toward a very limited license in the 200 gross ton category. The Coast Guard
will continue to evaluate courses in this regard. It is not our intent to "approve" these courses, but we will evaluate and accept them in lieu of a portion of the required service.

## 52. Visual Acuity Requirements

We received some lengthy comments concerning the proposed regulations for corrective lenses and the requirements to carry spare lenses on board a vessel while serving under the authority of a license. Nothing has changed from present policy in granting waivers or in regard to the responsibility of the license holder. We do not feel the liability has been placed upon the master in this situation where the license holder may be required to carry the spare lenses aboard. This has been our policy in recent years and will continue in the future. The only change resulting from this proposal would be that local offices could grant waivers up to a visual acuity of $20 / 200$.

Evaluation by Coast Guard Headquarters would be required for vision which was worse than $20 / 200$. We have also stated in the regulations that uncorrected vision of worse than $20 / 400$ would not normally receive a waiver.

## 53. Signaling (Flashing Light) Requirements for Licenses

Many commenters requested further discussion of the proposed requirements for signaling for licensed of ficers. The proposal requires testing on flashing light for service on vessels of over 150 gross tons. While the Coast Guard is still considering a lower rate of testing (possibly four words per minute versus six words
per minute) for vessels under 1,600 gross tons, we intend to keep this requirement in place. Regulations contained in 46 CFR 111.75-18 require the signal light to be installed or aboard all self-propelled vessels of over 150 gross tons on international voyages. The Coast Guard's opinion is that if the gear is required on board the vessels, the deck officers should be trained in its operation. Certainly, as a national security measure in wartime, U.S. flag vessels must be able to identify themselves by flashing light when entering harbors and ports on U.S. coasts. This requirement for testing will only be included in the ocean license categories with service authorized on vessels above 150 gross tons.

## 54. Character References

Some commenters suggested making the requirement for character references more difficult for original licenses. The Coast Guard will require a written recommendation from a master and two other licensed officers. For license as engineer or pilot, at least one of the recommendations must be from the chief engineer or licensed pilot, respectively, of a vessel on which the applicant has served. For small-boat experience where service may not have been gained in the presence of another licensed individual, the Coast Guard requires the written recommendation of a marina operator or other vessel operator who has observed the applicant at some time during his or her service. The individual who has obtained service only on small boats with family members or friends as witnesses would have to provide written recommendations
taking into account the applicant's experience and performance.

## 55. Character Check for Uninspected Towing Vessel Operators

Comments were received from members of the towing industry which requested an alternative to the proposed references and recommendations needed for original license. Certain situations in that industry and also in the small passenger vessel industry would make the proposed requirements very difficult to comply with. The comments suggested retaining a provision under the existing towboat operator licensing requirements. The Coast Guard agrees with this suggestion and will add the alternative suggested in the existing 10.16-21(d). This will allow the written recommendations of recent marine employers if at least one such endorsement is from the master, operator, or person in charge of a vessel on which the applicant has been employed.

## 56. Tankermen Qualifications for Masters and Mates

By virtue of converting the operators and ocean operators of small passenger vessels to master and mate licenses, it can be implied that these people will also have a tankerman qualification. That is not the Coast Guard's intent. We have provided an exclusion for licensed deck officers on vessels of 200 gross tons and under from any automatic tankerman qualification.

## 57. Service Time Required for Mate 200 Gross Ton License

Many commenters sug-
gested lowering the service time required for original license as mate 200 gross tons. The original proposal suggested 18 months' service for the near-coastal mate and 6 months for the inland mate. Other suggestions supported further lowering of the service requirements to 3 to 6 months. The Coast Guard feels that this mate can serve as an offi-cer-in-charge of a watch, and this responsibility requires more service than just 3 to 6 months' offshore experience. We will reduce this service time in this proposal to 12 months for the near-coastal mate and retain the limit at 6 months for the inland mate. Many comments from certain areas of the country requested further reductions in service for the mate license to 90 days' experience. As has been done in the past, local Coast Guard policy may allow for a reduced service time for specially limited licenses. Service and examination requirements may be modified in those special circumstances. The authority of the OCMI to modify licenses, as appropriate, will remain as before in this new proposal.

## 58. Licensing Hierarchy

Many commenters requested a table or a license hierarchy which showed the precedence list for all types of licenses. For example, this table would indicate whether a third mate unlimited was superior to a master 200 gross tons or a chief mate was senior to a master 1,600 gross tons and whether a second assistant engineer unlimited was superior to a designated duty engineer. While a license hierarchy table or chart would be very helpful for everyone involved in the licensing process - including the appli-
cants, those serving on vessels, and the Coast Guard in administering the system - it is extremely difficult to equate different types of licenses. There are many variables which specify the authority for each license, such as tonnage limitations, route limitations, horsepower limitations, trade or vesseltype restriction, inspected versus uninspected vessel restriction (although we are trying to delete those in nearly all licenses), and also the rank of the license itself, such as a third mate or mate, a chief mate, or a limited master. Some assumptions have been made which will help explain our position with respect to license transitions and equivalents in the proposed license structure charts. Some of these assumptions are that (1) inspected vessel licenses authorize the holder to serve on uninspected vessels within the limitations placed on the license, (2) ocean or nearcoastal route restrictions on a license enable a person to serve in inland waters within the limitations of the license, and (3) certain licenses, such as pilot and operator, would have to be kept separate, by definition, from this standard chart. In developing the flowcharts, the Coast Guard considered the total amount of service required for each individual license and the depth of the examination required. Although the licenses are rarely needed or issued, those for auxiliary sail or sail vessels of over 200 gross tons would require a master or mate to obtain an amount of service in that mode of propulsion to have the sail or auxiliary sail endorsement to the license.

With all of these considerations, it is our opinion that a license hierarchy would be
confusing and subject to much interpretation. The proposed flowcharts imply much of the precedence; the Marine Safety Manual and published policy will further amplify and explain license comparisons as necessary.

## 59. Continuing Education and Training

The Coast Guard subscribes to the international philosophy encouraging additional training and education for the maritime industry. The proposed initiatives for training not only will result in a more qualified and wellrounded mariner, but also will allow substitution of training time in an approved course for a portion of the required sea service for many licenses. The new technological advances are partially responsible for the proposals because equipment and operating methods on vessels have become increasingly sophisticated. The Coast Guard realizes that a mariner must keep abreast of all new maritime practices to remain competent and perform at the expected high levels. Another consideration is the introduction of minimal manning, which inhibits mariners from pursuing training while underway. The Coast Guard's opinion is that shore-based training can provide experience equal to or greater than some experience gained during normal sea tours. This thinking has also led us to simulator training which we discussed previously. Our philosophy is reinforced by international agreements and conventions which specifically recommend various training courses and also allow the substitution of training for underway service.

Of course, for these training courses to be accept-
ed by the Coast Guard, they must be "approved." "Approval" means that the course, the curriculum, the physical plant, the instructors, and just about all details of an educational program are evaluated by our local Coast Guard office and also by Headquarters. The approved course may be substituted for a part of an examination, for required training, or for required service time toward licenses and certificates. Some comments received to the docket on this point were very strongly against any substitution of sea time by any type of training. The Coast Guard feels that a specified amount of sea service is most essential to ensure that mariners get the experience they need to be competent professionals; however, the importance of training must also be recognized. By providing an incentive for mariners and ensuring that the schools are training institutions of quality, the Coast Guard hopes to encourage mariners to attend these approved courses.

## 60. Three-Watch System for Uninspected Towing Vessels

Many commenters expressed a concern about imposing a three-watch system on uninspected towing vessels if the operators were to become masters or mates on these vessels. In 46 U.S.C. 8104(d), an ambiguity was created regarding the watch requirement when the term licensed "individuals" was used in place of licensed "officers" as in the predecessor statute. Considering the legislative history of this law, we have concluded that the two-watch system continued to apply to the operators (emphasis added) of these vessels. However, to serve on an uninspected tow-
ing vessel more than 200 miles offshore (de fined as ocean service), master and mate licenses are required in this proposal. The license as operator of uninspected towing vessels is limited to 200 miles offshore and the inland waters of the United States. Therefore, for vessels in ocean service, the three-watch system as discussed in 46 U.S.C. 8104(d) will apply. The licensed individuals holding licenses as master or mate for steam or motor vessels of not more than 200 gross tons upon ocean or near-coastal waters are subject to the three-watch system. Of course, in this case, 46 U.S.C. $8104(\mathrm{~g})$ provides relief from the threewatch system when the voyage is less than 600 miles.

## 61. Support of Comments Submitted by the Towing Safety Advisory Committee (TSAC)

Many commenters expressed complete support for the comments submitted by the Towing Safety Advisory Committee (TSAC) during January 1984. The comments submitted by TSAC are addressed in various other paragraphs in this preamble. For convenience, they are reiterated here. The suggestions were to (1) retain celestial navigation in exams, (2) maintain the existing license renewal procedure, (3) retain the creditable service time philosophy, (4) use oral examinations on a limited basis, (5) accept service on integrated tug-barge units, (6) continue to issue towboat operator licenses with an open route, (7) discuss towboat operators and the three-watch system, (8) employ boundary lines, (9) assess the impact of the 1969 Tonnage Convention, and (10) discuss international negotiations on STCW.

## 62. Acereditation Board for Engineering and Technology Schools

Some commenters recommended our accepting a "duly recognized school of technology" as the criteria for training schools which will permit an applicant to obtain a third assistant engineer's license. The Coast Guard proposed the phrase, "accredited school recognized by the Accreditation Board for Engineering and Technology." We have formalized the list of accepted schools by mentioning the publication we used previously under the "duly recognized school of technology" title.

## 63. Equate Operator of Uninspect Passenger Vessels (Previously Motoboat Operator) License with Mate 200 Gross Tons

Several commenters suggested equating the license for operator of uninspected passenger vessels with the mate 200 gross ton license for nearcoastal or inland service. The Coast Guard agrees with this suggestion. This proposal lowers the service requirement for the mate on nearcoastal waters from 18 to 12 months, and the mate on inland waters remains at 6 months' service required. These experience requirements equal those for the license as operator of uninspected passenger vessels. Therefore, we will allow the holder of this license to obtain a mate license by completing the additional examination requirements which were not included on the lesser exam.: These subjects may be determined by comparing the exam requirements between the li-1 censes in Subpart 10.900.

## 64. Ferry Vessel Operations

Some commenters requested clarification on ferry vessel service and the opportunity for advancement in that industry. The proposal replaced the ferry vessel license with the inland master license with unlimited tonnage. The progression to that master's license required service time as a mate in the unlimited category. Comments received to the docket suggested an alternative method of accepting service as a pilot on a two-for-one basis to obtain the master's license. The Coast Guard agrees with those comments and will add an alternative method to progress to the master license. Time spent as first class pilot while serving in the deck house, possibly as quartermaster while holding the license as first class pilot, will be accepted. This time was usually credited on a two-for-one basis because pilots normally worked less than a full 8 -hour day in this capacity, and we will continue that ratio. However, if 8 -hour days are spent in that capacity, the local office will evaluate this service on an equivalent one-to-one basis.

## 65. Limited Engineer Licenses

Commenters suggested removing the route limitations for engineer licenses in the limited category for chief and assistant engineers. With the introduction of the "designated duty engineer" license concept, these licenses appear to be unecessary and are removed from this proposal. The vessels to which these licenses apply are typically manned by a single licensed engineer and the designated duty engineer license will suffice. Appropriate changes to the manning regulations are
included to reflect this philosophy.

## 66. Style and Type of Licenses

Some commenters suggested using small, laminated cards similar to the size of credit cards in lieu of the typical licenses presently in use. The Coast Guard does not agree with those comments. The laminated credit card size license would be very small and difficult to read. These licenses often require many lines and would be unreadable if reduced or abbreviated. It is the responsibility of the mariner to hold and exhibit licenses which authorize service on the vessel which they are employed.

## 67. Present Authority Under Licenses

Many commenters were concerned that they would lose authorities granted to them under their present licenses. For the transition to the proposed licenses, a crossover chart is included in this proposal. Furthermore, the Coast Guard has attempted to cover every possible situation in which a person converts to a license in the new system with different route or tonnage limitations. Generally, the authorities granted under most limited licenses have been expanded; however, there are some situations where existing license routes (such as lakes, bays, and sounds) allow people to serve on waters which are presently outside of the COLREGS demarcation lines. These situations have been resolved in this proposal and, if not satisfactory to the applicant, will be resolved on an individual basis at a Regional Examination Center. It is not our intention to
remove any authority which a person presently holds under a license by converting to any license in the new system.

## 68. License Transition for Certain Inland Licenses

A number of comments were received concerning the inland licenses (such as master of vessels upon lakes, bays, and sounds) and their conversion to the new system. Because of the unique route limitation of this license and the possibility of service in waters where the international COLREGS apply, the Coast Guard felt this item was worthy of a special comment in the preamble. As stated before, it is the Coast Guard's intention to retain all authorities which license holders had under the old system through to this new proposed licensing system. For the master, lakes, bays, and sounds license where the license holder may have served in COLREGS waters, the applicant would convert the license to a master nearcoastal unlimited. To progress to a master unlimited license, individuals must have their total experience evaluated by Coast Guard Headquarters to equate to the total service required for the deep-sea licenses. An additional examination would also be required.

## 69. Tonnage Categories in 0 to 200 Gross Tons Range

A number of commenters suggested fewer tonnage categories in the 0 to 200 gross ton range. The Coast Guard does not agree with that suggestion and prefers the 50 ton increments originally proposed. In present regulations, there are 25 ton increments between 0 to 100 gross tons for the small passenger vessel license. We
have extended the tonnage limitation to 200 gross tons and maintained the four tonnage categories. In our opinion, it is preferable to keep the 50 ton increments to distinguish different sizes of vessels and the unique handling characteristics between them. Certainly, most license holders will serve on vessels between 0 to 100 gross tons in the small passenger vessel category. For these personnel, the two tonnage increments, 0 to 50 and 50 to 100 , should satisfy their licensing needs. For the 150 and 200 gross ton categories, we provided direct methods to obtain the higher tonnage endorsements in this proposal.

## 70. Removal of River Mate (Non-navigating) License

Due to statutory changes and the rarity of this position on present inland vessels, the Coast Guard decided to eliminate the river mate license. Although this license will not be issued as an original in the future, those persons holding the license may continue to renew. Newly created mate licenses in the 1,600 gross ton and unlimited tonnage categories may be used in the future.

## 71. General Changes to Manning Regulations

Part 157, Manning of Vessels, is being relocated to Subchapter B, Part 15, for convenience in referring to the licensing and certification regulations. In addition, the regulations are being reorganized into a format which will make them easier to follow, and the language is being updated to clarify the intent of the various regulations. $\mathrm{Re}-$ dundant or outdated regulations have been eliminated or combined to simplify the regulations.

Changes to the manning regulations have been made to reflect practices on vessels using automation or laborsaving devices. Several changes were also necessitated by legislation. Included in the changes is a definition of "maintenanceperson" to reflect the use of such personnel on board vessels having a maintenance department. The maintenanceperson can be employed aboard vessels having reduced manning requirements due to automation and use of labor-saving devices. There would be no legal restriction as to the use of members of the maintenance department anywhere on these vessels.

While the maintenanceperson would not be considered a watchstander, that person could be used as backup to the watch personnel, to augment the watch personnel in times of emergency, or as the master deemed appropriate during times when circumstances dictate. The certificate of inspection may stipulate that specific qualifications be held by the maintenanceperson to assure that the personnel used during periods of augmentation are properly trained to perform the duties which might be expected of them.

Further, the permitted use of a designated duty engineer as identifed in Part 10 is found in Section 15.825 . The responsibility of the master for setting watches is clarified, and the definition of sailors is updated to more accurately reflect the use of able seamen and ordinary seamen aboard modern vessels. Utilization of pilots is the subject of two separate regulatory projects (CGD 77-084 and CGD 84-060), and Section 15.815 is reserved for insertion of those regulations. Should these regulatory proposals be completed first, the existing regulations in Part 157 will be inserted in this section as an interim measure.

Comments on this supplemental notice of proposed rulemaking must be received by February 21,1986 , and should be submitted to the following address:

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Executive Secretary Marine Safety Council
(G-CMC/21)
CGD 81-059
U.S. Coast Guard
Washington, DC 20593
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Between 8:00 a.m. and 4:00 p.m. Monday through Friday, comments may be delivered to and will be available for inspection or copying at the Marine Safety Council (G-CMC/21), Room 2110, U.S. Coast Guard Headquarters, 2100 Second Street SW, Washington, DC 20593, phone (202) 426-1477.

See the Introduction section of this magazine, page 259, for the dates, times, and locations of public hearings.

For further information, contact CDR George N. Naccara, Project Manager, Office of Merchant Marine Safety (G-MVP), phone (202) 426-2240.

# CGD 81-059a Licensing of Officers and Operators for Mobile Offshore Drilling Units 


#### Abstract

Summary The Coast Guard is changing the sections of its proposed complete revision of 46 CFR Part 10 (CGD 81-059, 48 FR 35920) which concerns the licensing of officers on mobile offshore drilling units (MODUs) and the manning of such vessels. These changes have been separated from the remainder of the revisions of Part 10 into a supplemental notice dealing solely with MODUs due to the substance of the comments received, the public demand for another notice with an open comment period with public hearings, and the urgency of this proposal. This proposal would establish three industry-restricted licenses and serve as a basis for establishing minimum marine manning requirements. Current Coast Guard regulations do not adequately address or consider the unique characteristics, operating conditions and procedures, service, and extraordinary chain of command and authority inherent in the offshore oil drilling industry.


## Dates

Comments must be received on or before February 21, 1986.

## Address <br> Comments should be submitted to the following address: <br> Commandant (G-CMC) <br> CGD-81-059a <br> U.S. Coast Guard <br> Washington, DC 20593

Between 8:00 a.m. and 4:00 p.m., Monday through Friday, comments may be delivered to and will be available for inspection or copying at the Marine Safety Council (G-CMC/21), Room 2110, U.S. Coast Guard Headquarters, 2100 Second Street, SW, Washington, DC 20593; telephone (202) 426-1477.

For further information, contact Commander George N. Naccara, Project Manager, Office of Merchant Marine Safety (G-MVP), phone (202) 426-2240.

## Supplementary Information

Interested persons are invited to participate in this rulemaking by submitting written data, views, or arguments. Comments should include the name and address of the person making them, identify this notice (CGD 81-059a), the specific section of the proposal to which the comment applies, and the reason for the comment. All comments received before expiration of the comment period will be considered before final action is taken on this proposal. Public hearings are planned in Washington, DC; New Orleans, Louisiana; Seattle, Washington; Governor's Island, New York; and Houston, Texas. Dates, times, and exact locations for these hearings are listed on page 259 of this magazine.

## Drafting Information

The principal drafters of this notice are Commander George N. Naccara, Office of Merchant Marine Safety, and Commander Ronald C. Zabel, Office of Chief Counsel.

## Background

Major marine casualties on U.S.-flag MODUs during the recent past have elicited quite similar recommendations from the National Transportation Safety Roard (NTSB) and the Coast Guard marine boards of investigation. The MODU OCEAN EXPRESS capsized and sank on April 15, 1976 - the pertinent comments from the NTSB were as follows:

Expedite the promulgation of the regulations for personnel qualifications and manning standards for self-elevating mobile offshore drilling units, and require that industrial personnel who perform seafaring duties obtain appropriate training and licenses.

Determine and require a functional chain of command on mobile offshore drilling units to effectively cope with extreme situations.

The MODU OCEAN RANGER capsized and sank on February 15, 1982. Similar recommendations concerning personnel training and qualifications were as follows:

Expedite the promulgation of regulations regarding personnel qualifications and manning standards for mobile offshore drilling units.

Require that the master and the person-in-charge of a MODU be licensed and that their licenses be endorsed as qualified in MODU operations, including knowledge of U.S. Coast Guard regulations, stability characteristics of MODUs, the operation of ballast systems on MODUs, and the use of lifesaving equipment peculiar to MODUs.

Require that the person-in-charge of a MODU also be a certificated lifeboat man.
Require that a control room operator on self-propelled and non-self-propelled semisubmersible MODUs be certificated or licensed and be qualified in the stability characteristics and ballasting procedures of MODUs and also as certified lifeboatman.

On October 25, 1983, the GLOMAR JAVA SEA capsized and sank. Although this vessel was a drillship, with distinct manning differences from semisubmersible MODUs, the NTSB drew the analogy from this casualty to the OCEAN EXPRESS, a self-elevating MODU, and to the OCEAN RANGER, a column-stabilized MODU. The recommendation to the Secretary of the U.S. Department of Transportation read:

Direct tite Commandant of the U.S. Coast Guard to address immediately the early promulgation of personnel qualifications and manning regulations for mobile offshore drilling units.

The Coast Guard has long recognized the need for special licenses adapted to the unique operations associated with mobile offshore drilling units. In response to this need, special industry licenses were created in 1973 for Master MODU, Mate MODU, Chief Engineer MODU, and Assistant Engineer MODU. To date, 353 masters, 123 mates, 77 chief engineers, and 22 assistant engineer MODU licenses have been issued.

The Coast Guard published a Notice of Proposed Rulemaking to completely revise licensing regulations in Part 10 of Title 46, Code of Federal Regulations, on August 8, 1983, at 48 FR 35920. This included proposed rules which formalized the special industry licenses and extended their application to all mobile offshore units. The applicability and appropriateness of these special licenses have often been questioned, but the need for some type of license and qualification has never been more apparent.

## Discussion

The comments to the docket for the complete revision of Part 10 (licensing regulations) which specifically addressed the MODU sections may be categorized quite succintly:

1. Publish a separate supplemental notice for MODU licensing and manning regulations (13 comments).
2. Convene public hearings within the comment period ( 66 comments).
3. Solicit more industry assistance and input to ensure appropriateness of any training, qualification, or examination standards ( 3 comments).
4. Publish manning scales for self-propelled and non-self-propelled MODUs in the supplemental notice ( 5 comments).

In this proposal, the Coast Guard addresses each of those comments. Initially, the proposal was to include all mobile offshore units (MOUs) but, due to limited statutory authority and the comments to the docket, we are restricting the applicability of the proposal to drilling units. Obviously, the MODU licensing and manning regulations have been separated into this supplemental notice of proposed rulemaking. Public hearings are planned during the 90 -day comment period (see page 259 for dates, times, and locations of the hearings). The International Association of Drilling Contractors (IADC) prepared and offered to the Coast Guard a marine task analysis. This report analyzed realistic industry practices and those tasks required of key positions. It also identified personnel training and qualification standards and essential marine tasks. The report provided valuable industry information to the Coast Guard and has been utilized in preparing this proposal. Proposed manning examples are also included in this notice to provide affected personnel an actual glimpse of Coast Guard plans. One should note the variables indicated on the proposed positions, realizing that the final arrangement is a function of the local Officer in Charge, Marine Inspection, and the owner or operator of the unit.

This proposal, in agreement with the industry task analysis, does not require any conventional licensed personnel on the non-self-propelled, bottom-bearing units. The Coast Guard proposes new licenses and endorsements for service on MODUs. This will provide for a person with extensive experience in the drilling industry and an understanding and appreciation for the marine aspects of drilling offshore to qualify for command on a non-self-propelled, bottom-bearing MODU.

Certainly the need for unique personnel qualifications and related problems exist in other countries of the world where MODUs are registered. Discussions have been held at the International Maritime Organization at various times during recent years. In fact, certain countries are presently requesting the IMO subcommittee on Standards of Training and Watchkeeping (STW) to establish uniform international standards of training and knowledge necessary for persons holding responsible positions on board MODUs. The position of the United States had been that the IMO subcommittee should "confine its consideration to the conventional maritime training and qualification standards appropriate...while in transit and on site floating...." Further, the U.S. position paper deliverd to IMO asserted that "consideration of the industrial aspects of such [MODU] operations is believed to be beyond the traditional expertise of the Subcommittee and should remain within the authority of each administration. It is indeed a difficult matter to determine the needed qualifications for a person in charge of a MODU since industrial and maritime aspects are so intertwined. The industrial aspects tend to override the marine aspects in terms of specialized knowledge. This knowledge is typically obtained by on-the-job training coupled with short-term shoreside training courses, which include portions dealing with maritime procedures and responsibilities."

It has therefore been the U.S. position (and one currently expressed by the Coast Guard) that each country should be left to develop its appropriate training and qualifications for the marine crews and those having joint marine/industrial responsibilities on MODUs. This philosophy is reflected in this proposal. The only statements concerning personnel qualifications and training on MODUs issued by the STW subcommittee exist in a working paper (STW/WP.4) which mentions the necessary familiarity the person-in-charge should have with the characteristics, capabilities, and
limitations of the unit. It further states that the person-in-charge must be fully cognizant of his responsibilities for conducting emergency drills, and that certain designated persons should possess the capability to operate all firefighting equipment and lifesaving appliances. This concept is also followed in this proposal.

Balancing the costly industrial and marine activities in the offshore environment is a complex mechanical-engineering task. The huge monetary investment and the large number of lives involved in the operation mandate a high level of quality in rig design, construction and equipment, and in personnel qualifications. It can be argued that the inherent dangers in the drilling operation are much more hazardous than most marine-related dangers encountered in the offshore environment. Recent MODU casualties have proved that the marine (primarily weather) conditions must be reckoned with, in addition to a constant concern for emergency procedures and casualty control actions precipitated by these extreme conditions. Any division of responsibility and authority for different operating modes, all of which require cognizance of their particular hazards, further complicates matters.

The Coast Guard is proposing three new specialized licenses that parallel the conventional masters and mates licenses. These new licenses are designated offshore installation manager, barge supervisor, and ballast control operator. Use of these specialized licenses would be restricted to certain MODUs under certain operating conditions. Persons serving under these licenses would perform functions with equivalent authority and responsibility as conventional masters and mates. For self-propelled MODUs, including drillships, the conventionally licensed deck officers on board would have to obtain the appropriate endorsement indicated in the proposed manning examples. It was felt by the Coast Guard, supported by NTSB findings and by industry representatives, that masters and mates must have special training and some amount of experience on MODUs prior to assuming positions of responsibility on these vessels. Appropriate sections in the proposal address these requirements with between 1 to 3 months' service and various industryrelated training courses. Your attention is also directed to 46 CFR 10.101 of the proposed licensing regulations in CGD 81-059. Repeating the part of this section: "...it is incumbent upon all licensed personnel to become familiar with all unique characteristics of each vessel served upon as soon as possible after reporting aboard for duty. As appropriate for a deck or engineer license, this includes but is not limited to: maneuvering characteristics of the vessel; proper operation of the installed navigation equipment; firefighting and lifesaving equipment; stability and loading characteristics; and main propulsion and auxiliary machinery." Certainly, this statement applies to many integral aspects of MODU operations.

Selection of the new descriptive titles for MODU licenses best reflects the appropriate authorities and responsibilities of these specialized positions. Conflicts with training requirements, experience levels, and examinations would arise with the STCW, 1978, Convention if the conventional master, mate, etc., title had been chosen. In order to satisfy the Officers' Competency Certificates Convention, 1936 ( 46 U.S.C. 8304), the Coast Guard must define the license terms as equivalent to a master or mate. Furthermore, 46 U.S.C. 7101, the Coast Guard's specific licensing authority, lists only the conventional license titles. The Coast Guard considers that the licenses addressed in this proposal are in fact licenses as masters, mates, etc.; however, different titles have been utilized to more accurately reflect their specialized use.

Applicants for any of the three licenses or endorsements to conventional licenses would have to successfully complete a Coast Guard written examination appropriate to their tasks and responsibilities. Recognizing that these licenses alone do not authorize service underway independently, typical navigation, shiphandling, and position determination topics were excluded. The emphasis instead was placed on ballasting and stability, emergency procedures, meteorology, lifesaving, firefighting, medical care, and maritime law and regulations. As the Coast Guard and industry representatives accomplished recently with the able seaman-MOU and lifeboatman-MOU ratings, we will again request assistance to design a comprehensive examination and develop the questions. The Coast Guard was quite satisfied with the results of the combined efforts of our own personnel in the Eighth Coast Guard District, the Coast Guard Institute, and the representatives from industry in preparing workable, understandable, and, most important, appropriate examinations.

A clear chain of command is essential on all MODUs. The contentious issue of "who is in charge?" has often been cause for concern. Whether the drilling or the marine department has overall responsibility could be debated at length. In this proposal, the person having ultimate authority is clearly the offshore installation manager (OIM), or the master or mate with OIM
endorsement, as appropriate. Our position does not rule out a concept of shared responsibility in some situations (but not shared authority) or the use of specialists in directing or assisting roles. The point to be made is that continuity and control must be assured through a central authority familiar with MODU characteristics and personnel and with an appreciation for all aspects of MODU operations.

The Coast Guard encourages and expects each company owning or operating MODUs to conscisely state in its operating manuals that on self-propelled MODUs the master (with appropriate license endorsement) or on non-self-propelled MODUs, the person serving in the capacity of offshore installation manager, has complete and ultimate responsibility for the rig. In the event that there is more than one person qualified to serve as OIM, it would be the responsibility of the owner of a unit or the owner's agent to designate the OIM in charge. There shall be only one person serving in the capacity of OIM. Certainly, this designation is essential for effective operations. Current and other proposed regulatory projects pertaining to MODUs still refer to the "master" or the person-in-charge for various responsibilities; however, these terms may also be replaced by the new license title in appropriate sections.

In determining a sufficient manning scale to operate any MODU, the Officer in Charge, Marine Inspection (OCMI) must consider many factors in addition to specific statutory and regulatory requirements. These factors indlude, but are not limited to, size of vessel, selfpropelled or non-self-propelled status, floating or bottom-bearing mode, length of voyage and route, fire protection and lifesaving equipment, number of personnel carried aboard, general arrangement of vessel equipment, level of qualification of each crew member to perform normal or emergency tasks, and successful operation of similar vessels.

The following proposed manning scales would become part of our published policy in the Marine Safety Manual:

## Proposed Manning Examples

1. Self-Propelled (Motor) MODUs underway independently (Voyage of more than 400 Miles):

1-Master (with Offshore Installation Manager endorsement)
3-Mates (with Ballast Control Operator endorsement)

* 6-Able Seamen

2-Ordinary Seamen
*-Lifeboatmen

* 1-Radio Officer

1-Chief Engineer
1-First Assistant Engineer
2-Assistant Engineers
3-Oilers
2. Self-propelled MODUs underway independently (voyage of 400 miles or less):

1-Master (with Offshore Installation Manager endorsement)
2-Mates (with Ballast Control Operator endorsement)
3-Able Seamen
1-Ordinary Seamen
*-Lifeboatmen

* 1-Radio Officer

1-Chief Engineer
2-Assistant Engineers
3-Oilers
3. Self-propelled MODUs under tow or on station, not bottom-bearing:

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    1-Master (with Offshore Installation Manager endorsement)
    1-Chief Engineer
    2-Ballast Control Operators (one must hold unlimited mate license)
* 2-Able Seamen
* 1-Ordinary Seamen
4. Non-self-propelled MODUs under tow or on station, not bottom-bearing:
1-Offshore Installation Manager (or OIM endorsement)
* 1-Barge Supervisor (or Barge Supervisor endorsement)
* 2-Ballast Control Operators (or Ballast Control Operator endorsement)
2-Able Seamen
1-Ordinary Seamen
5. Non-self-propelled or self-propelled MODUs on station, bottom-bearing:
1-Offshore Installation Manager (or OIM endorsement)
2-Able Seamen
1-Ordinary Seamen
*Variables
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In a related matter, personnel in the offshore drilling industry are reminded that all persons aboard MODUs are considered seamen and are a part of the crew. As such, they are required under 46 U.S.C. 8702 to hold merchant mariner's documents. The Coast Guard realizes that this issue has not been addressed consistently in the past, but hopes to resolve the problem with this guidance.

Two other items must be discussed which are not specifically addressed in the proposal, and we encourage specific comment from the public. First, the Coast Guard historically has relaxed manning levels when a unit is in a bottom-bearing mode or when on location making short in-field moves. Your comments are encouraged in assisting us to define when a unit is in a "bottom-bearing mode" (i.e., when is the unit in the final elevated position prior to commencement of drilling?) and in defining a "short in-field move" (should we limit a move based on distance, duration, or both?). The second item concerns a need for a MODU engineer license. Relaxing the manning levels for a self-propelled MODU on station or under tow is justified, but should the Coast Guard design a MODU restricted engineer (as had been available for 12 years, but rarely utilized)? Should the conventional licensed engineer obtain an endorsement for MODUs similar to the deck officers? There is some industry support on these licensed engineer issues, and your comments are requested.

The text of these proposed regulations is designed to fit into the remainder of the proposed changes to Parts 10 and 157 (redesignated as Part 15) which are also being published in a supplemental notice of proposed rulemaking.

## Regulatory Evaluation

The Coast Guard considers these proposed regulations to be non-major under Executive Order 12291 and non-significant under DOT regulatory policies and procedures (44 FR 11034; 26 February 1979). Published as a supplemental NPRM under the Licensing of Officers project, Coast Guard docket CGD 81-059 contains a full draft regulatory evaluation which also applies to this proposal. It may be inspected or copied at the Marine Safety Council (G-CMC/21), Room 2110, U.S. Coast Guard Headquarters, 2100 Second Street, SW, Washington, DC 20593, from 8 a.m. to 4 p.m.

The costs associated with the proposal primarily concern training of personnel. The proposed regulations are not expected to have a significant economic impact. The proposal will not require any major expenditures by the maritime industry, consumers, federal, state or local governments. The proposal requires individuals serving in certain responsible positions on MODUs of either the self-propelled or non-self-propelled type to obtain a Coast Guard-issued license or endorsement that qualifies them for the positions held. Implementation would not increase manning require-
ments on MODUs but rather would set a standard for training and experience for certain responsible positions. Persons holding these positions on MODUs would have to meet licensing qualifications including a particular level of experience on MODUs, completion of training courses, physical standards, and professional examination. Most drilling companies already require high standards of experience and training for the people serving on their vessels.

The cost of the training required by the proposal is summarized below. The total cost of $\$ 5,123,290$ presumes that all personnel who will be required to hold the proposed licenses or endorsements on all active U.S.-flag MODUs would require the training. The total may be considered as a one-time start-up cost with minimal additional costs in the ensuing years.

## Figure 1 MODU Licenses

 Of course, anyone entering the industry thereafter would be required to meet the same requirements; however, the offshore industry has been on a hiring plateau or decline for the past few years, and there appears to be no problem in drawing from the current pool of qualified personnel. The following factors will significantly reduce the total cost shown in the evaluation. It is, however, impractical to quantify the exact cost savings without polling every licensee and potential license holder in the industry:
(1) Through conversations with industry representatives, it was determined the proposed amounts of experience are reasonably equivalent to the level of those persons serving in present positions of responsibility.
(2) Many assigned personnel also hold previously issued Coast Guard licenses as master MODU (353 licenses issued), mate MODU (123 licenses), chief engineer MODU ( 77 licenses) and assistant engineer MODU ( 22 licenses). By virtue of holding these licenses, they will have met our current Coast Guard qualification standards including experience, physical standards, and professional examination. However, the license holders would have to meet the training requirements.
(3) Many established drilling companies have designed and developed their own in-house training courses and facilities; therefore, these companies already train their personnel in courses similar to what is contained in the proposal without any federal or state regulatory mandate. While some costs must still be absorbed, such as loss of productive work time, salary, travel, and per diem, the actual cost of the training will be much less when provided by the parent company. Furthermore, by allowing industry certification of courses in most cases, rather than Coast Guard approval, additional flexibility is provided for on-site training with company employees, video cassettes, and other portable training devices.
(4) The Minerals Management Service (MMS) already requires attendance at a training course for blow-out prevention or well-control training for persons in certain positions on MODUs. The Coast Guard will accept evidence of completion of the required MMS course as satisfying this training requirement.
As explained previously, the total cost will be mitigated by company-owned or companysponsored training offered on-site to large groups of personnel, among many other factors. Furthermore, the costs associated with licensing and qualifications of the personnel in positions of responsibility on MODUs are quite insignificant when compared to typical MODU construction costs and operating fees. Current estimates of construction range from $\$ 40$ to $\$ 70$ million for a jack-up rig, $\$ 70$ to $\$ 110$ million for a semisubmersible, and $\$ 55$ to $\$ 125$ million for a drillship. Operating fees range widely from $\$ 15,000$ to $\$ 105,000$ per day for jack-ups, $\$ 35,000$ to $\$ 45,000$ per day for semisubmersibles, to $\$ 12,000$ to $\$ 50,000$ per day for drillships. The training and qualifications contained in the proposal which are strongly recommended by the National Transportation Safety Board, generally supported by industry, and are under serious consideration internationally, will certainly be justified if they contribute to preventing the loss of even one MODU and its crew, or even minimize the down-time of an operating unit.

## Final Rule

CGD 83-070, Revision of Tonnage Measurement Regulations (1 October)

This final rule clarifies, consolidates, and reorganizes simplified tonnage measurement regulations. The rule became effective October 1, 1985.

## Proposed Rule

CGD 84-069b, Lifesaving Equipment; Thermal Protective Aids (1 October)

The Coast Guard proposes to adopt specifications for approving thermal protective aids. Comments on this proposal must be received on or before December 30, 1985.

## Advance Notice of Proposed Rulemaking (ANPRM)

CGD 85-019, Delegation of Authority to United States Classification Societies (3 October)

The Coast Guard is considering adding a section to Part 2 of Title 46 CFR which will define United States Classification Societies similar to the American Bureau of Shipping and delineate how a society can seek and be granted authority to work in a like manner on behalf of the Coast Guard. Comments on the framework and criteria that should be used to determine who will be allowed to work on the Coast Guard's behalf are solicited by the ANPRM. The comments must be received on or before January 2, 1986.

## Notice

CGD 85-078, Chemical Transportation Advisory Committee; Request for Applicants (7 October)

The Coast Guard is seeking applicants for appointment to membership on the Chemical Transportation Advisory Committee (CTAC). Persons interested in applying should write Commandant (G-MTH), U.S. Coast Guard Headquarters, 2100 Second Street, SW, Washington, DC 20593.

CGD 85-083, National Boating Safety Advisory Council; Meeting (15 October)

The National Boating Safety Advisory Council meeting will be held on Tuesday and Wednesday, November 19 and 20, 1985, at the Westgate Hotel, 1055 Second Street, San Diego, California, beginning at 9:00 a.m. and ending at 4:00 p.m. on both days. Contact Captain M.B. Stenger, Executive Director, National Boating Safety Advisory Council, U.S. Coast Guard (G-BBS), 2100 Second Street, SW, Washington, DC 20593, or call (202) 426-1080 for further information.

## Request for Comments

CGD 85-089, Training in the Use of Automatic Radar Plotting Aids (ARPA) (24 October)

On November 19, 1981, the 12th Assembly of the International Maritime Organization (IMO) adopted Resolution A.482, entitled "Training in
the Use of Automatic Radar Plotting Aids." The Coast Guard invites comments on whether regulatory action is necessary to ensure that the training of U.S.-licensed officers meets the IMO recommendations.

## Supplemental Notice of Proposed Rulemaking

CGD 81-059, Licensing of Maritime Personnel; CGD 81059a, Licensing of Officers and Operators for Mobile Offshore Drilling Units (24 October)

These two supplemental notices are discussed in detail in this issue of Proceedings. Readers are urged to submit comments concerning these supplemental notices on or before February 21, 1986.


The members of the Marine Safety Council, U.S. Coast Guard, and the staff of this magazine wish all our readers a joyous and safe holiday season.

