

**ACTION: REPORT TO CONGRESS ON PLAN FOR
LICENSING OPERATORS OF COMMERCIAL FISHING
VESSELS**

Admiral J. W. Kime
Commandant, U.S. Coast Guard

16721
G-MVP
CAPT F. J. Grady
267-0214

Thru: The Secretary
The Deputy Secretary

BACKGROUND:

The Commercial Fishing Industry Vessel Safety Act (Public Law 100-424) requires that a plan for licensing operators of federally documented commercial fishing industry vessels be sent to Congress within two years after the date of enactment. The law was signed by President Reagan in September 1988.

DISCUSSION:

The Coast Guard plan to license fishing vessel operators contained in the attached report proposes that the Coast Guard authorize third parties to certify compliance with professional competency standards, thus allowing the Coast Guard to maintain high standards at a reasonable cost. Successful completion of an approved third-party certification program would be the foundation on which issuance of Coast Guard licenses would be based.

RECOMMENDATION:

That you sign the attached letters which transmit the report to Congress.

2 Attachments

The Honorable Thomas S. Foley
Speaker of the House of
Representatives
Washington, DC 20515

Dear Mr. Speaker:

The Commercial Fishing Industry Vessel Safety Act, Public Law 100-424, which was enacted on September 9, 1988, requires a plan for licensing operators of federally documented commercial fishing industry vessels. This letter forwards the required plan and information.

The plan has been developed in consultation with the Advisory Committee established by the Act. Contacts also were made with commercial fishermen, professional associations of the industry, industry media representatives, academicians, federal and state agencies, as well as representatives of foreign national agencies that regulate commercial fishermen.

The Coast Guard has previously participated in voluntary programs designed to inform and educate members of the commercial fishing industry. The Coast Guard has worked in harmony with the industry to develop voluntary standards for vessel design and equipment as well as training and education of vessel operators. However, the problem has proved to be beyond the scope of voluntary programs.

The Coast Guard plan to license fishing vessel operators contained in the attached report proposes that the Coast Guard authorize third parties to certify compliance with professional competency standards, thus allowing the Coast Guard to maintain high standards at a reasonable cost. Successful completion of an approved third-party certification program would be the foundation on which issuance of Coast Guard licenses would be based.

I have sent an identical letter to the President of the Senate. I hope this information is helpful.

Sincerely,

Samuel K. Skinner

Enclosure

The Honorable Dan Quayle
President of the Senate
Washington, DC 20510

Dear Mr. President:

The Commercial Fishing Industry Vessel Safety Act, Public Law 100-424, which was enacted on September 9, 1988, requires a plan for licensing operators of federally documented commercial fishing industry vessels. This letter forwards the required plan and information.

The plan has been developed in consultation with the Advisory Committee established by the Act. Contacts also were made with commercial fishermen, professional associations of the industry, industry media representatives, academicians, federal and state agencies, as well as representatives of foreign national agencies that regulate commercial fishermen.

The Coast Guard has previously participated in voluntary programs designed to inform and educate members of the commercial fishing industry. The Coast Guard has worked in harmony with the industry to develop voluntary standards for vessel design and equipment as well as training and education of vessel operators. However, the problem has proved to be beyond the scope of voluntary programs.

The Coast Guard plan to license fishing vessel operators contained in the attached report proposes that the Coast Guard authorize third parties to certify compliance with professional competency standards, thus allowing the Coast Guard to maintain high standards at a reasonable cost. Successful completion of an approved third-party certification program would be the foundation on which issuance of Coast Guard licenses would be based.

I have sent an identical letter to the Speaker of the House of Representatives. I hope this information is helpful.

Sincerely,

Samuel K. Skinner

Enclosure

U. S. COAST GUARD

COMMERCIAL FISHING INDUSTRY VESSEL SAFETY ACT OF 1988

P. L. 100 - 424

**A PLAN FOR LICENSING OPERATORS OF
UNINSPECTED FEDERALLY DOCUMENTED
COMMERCIAL FISHING INDUSTRY VESSELS**

Table of Contents

I. INTRODUCTION-1-

II. BACKGROUND-3-

III. A MERCHANT MARINE OFFICER'S LICENSE:
PRIVILEGES AND RESTRICTIONS-5-

IV. GENERAL PROCEDURES TO UPHOLD
PROFESSIONAL COMPETENCY STANDARDS-7-

V. PREVIOUS COAST GUARD EFFORTS TO IMPROVE
COMMERCIAL FISHING INDUSTRY VESSEL SAFETY-8-

VI. LEGISLATIVE ASPECTS OF IMPLEMENTING A LICENSING PROGRAM
FOR OPERATORS OF COMMERCIAL FISHING INDUSTRY VESSELS ..-10-

VII. SUMMARY OF ACTIONS TAKEN TO DEVELOP A LICENSING PLAN ..-11-

VIII. COMMENTS FROM INDUSTRY, THE PUBLIC, AND THE COMMITTEE
GENERAL COMMENTS ABOUT LICENSING-13-
ALTERNATIVES IDENTIFIED BY THE COMMENTS-15-

IX. ESTIMATES OF COAST GUARD RESOURCE NEEDS TO LICENSE
OPERATORS OF COMMERCIAL FISHING INDUSTRY VESSELS-17-

X. DISCUSSION OF ALTERNATIVES-21-

XI. THE PLAN FOR LICENSING OPERATORS OF FEDERALLY-DOCUMENTED
COMMERCIAL FISHING INDUSTRY VESSELS-32-

Executive Summary

The Commercial Fishing Industry Vessel Safety Act of 1988 (P.L. 100-424) was passed in September 1988, requiring the Coast Guard to provide a plan to license operators of federally documented commercial fishing vessels. This requirement was based on the historically poor safety record of the commercial fishing industry and on Congressional desire to improve that record.

Previous efforts by the Coast Guard to improve commercial fishing industry safety have relied upon voluntary participation. Despite these measures and the promise of the industry to institute their own standards, tragedies have continued to occur at an unacceptable rate. The problem has proved to be beyond the scope of effective action through voluntary measures.

There is no existing statutory authority which allows the Coast Guard to require a licensed operator aboard commercial fishing industry vessels of less than 200 gross tons. Therefore, there are approximately 36,200 people aboard 30,000 vessels that are not required to be licensed. The Coast Guard does have authority to require licensed personnel on commercial fishing industry vessels of 200 gross tons or more. This existing authority requires approximately 500 persons aboard 250 vessels to be licensed. To obtain statutory authority to implement a new comprehensive licensing program, additional legislation is needed which will require uninspected commercial fishing industry vessels of less than 200 gross tons to be operated by licensed individuals.

The Coast Guard recognizes that imposing a licensing program on commercial fishermen would place a burden on the industry as well as on the government. The industry and the public were invited to identify alternatives to the existing licensing program. Five alternatives were identified and each was analyzed for its potential to improve safety in the industry, its enforceability by the Coast Guard, and the costs of that enforcement.

The results of the analysis indicate the need for a new program of shared responsibility between government and private industry for maintaining professional standards, thereby improving the industry safety record at reasonable cost. This report explains that conclusion and offers a plan to implement it.

The proposed plan authorizes third parties to certify compliance with federal professional competency standards. That certification will be treated as partial eligibility to obtain a license. This plan offers the best promise to improve safety at reasonable costs for all concerned.

I. INTRODUCTION

It is generally acknowledged that commercial fishermen are engaged in one of the most hazardous of all occupations. This impression is confirmed by data compiled from reports of casualties and personnel accidents submitted by vessel owners, masters, or persons in charge of vessels as required by federal regulations. For years, commercial fishing has had one of the worst safety records of all U.S. industries.

Recent casualties such as the losses of the fishing vessels ALEUTIAN ENTERPRISE, ATTU, JAUS, LITTLE ANN, HEIDI MARIE, SOL E MAR, TAMMY D II, CASEY NICOLE, TWO BROTHERS, TIARA, SIN HUNG, CAPAZ, ADVENTURE, GAMBLER, and many others, demonstrate that there is ample reason to implement a program to improve professional competency within the commercial fishing industry.

During Fiscal Year 1989, the Coast Guard responded to more than 4,100 search and rescue cases involving commercial fishing industry vessels. These cases resulted in the saving of 588 lives and over \$73 million in property. Coast Guard search and rescue data for FY89 indicate that more than 87 percent of commercial fishing vessels assisted were greater than 25 feet in length and about 15 percent of all the cases occurred more than 20 miles from shore. These search and rescue cases involving commercial fishing industry vessels accounted for 8 percent of the total work load and 15 percent of total sortie time. The figures reflect the fact that fishing vessel search and rescue cases tend to be more serious in nature, require more resources, and require nearly twice the time to resolve than any other type. For these reasons, commercial fishing vessel search and rescue cases represent a significant portion of the operating cost of the Coast Guard's search and rescue program. Recent casualties point out that millions of dollars are still spent on search efforts that do not result in rescues.

Over the past two years, Coast Guard personnel have met with government and industry representatives to discuss possible alternatives to the existing licensing program. The Coast Guard has offered a "blank slate" throughout these discussions. The Coast Guard asked for assistance from industry media representatives to publicize these efforts and to obtain ideas. The industry and the public were asked to identify any possible alternative with potential to reduce the number of casualties which continue to plague the industry. Foremost among those solicited for input were members of the industry. Also included were the Commercial Fishing Industry Vessel Advisory Committee, other federal agencies, Coast Guard units, industry associations, and state agencies. These efforts to obtain advice and recommendations included contacts with other nations' agencies which regulate commercial fishermen.

Commercial fishing has been largely unregulated and unsupervised, except for marine species conservation concerns. Anyone able to obtain financial sponsorship can buy and equip a boat, and can purchase the necessary state and federally issued conservation permits. Although there are state permits and similar registration requirements to obtain authorization to fish in some states' waters, there are no competency requirements enforced by federal or state governments, or any other organizations. All of these permit and registration programs are solely intended to obtain revenues to enforce conservation programs, and they have no safety purpose. Persons may present themselves as "captains" without ever having to demonstrate competency to operate the vessel or its equipment. Similarly, persons may offer themselves for hire as crew aboard a fishing vessel without ever having to demonstrate competency to operate the vessel or its equipment.

In September 1988, Congress focused its attention on minimum standards of safety for men and women who work in the commercial fishing industry and directed the Coast Guard to develop plans to improve safety within the industry. There is no single solution to reduce the high rate of vessel casualties and personnel accidents occurring aboard vessels of the commercial fishing industry. However, all indications point to two complementary programs as essential to improving safety: 1) a program to establish mandatory standards for professional competency and, 2) a program to establish equipment requirements, as well as design and construction standards. The overall effectiveness of Coast Guard efforts to improve safety will be directly dependent upon these two related programs. A regulatory project to establish equipment requirements, and design and construction standards for commercial fishing vessels is underway. This report deals with the first issue: determining and applying standards of professional competency for operators of commercial fishing industry vessels.

II. BACKGROUND

The United States Coast Guard has collected vessel casualty and personnel accident data concerning the commercial fishing industry for more than three decades. When compared to other vessels in commercial service, fishing industry vessels have always had a relatively poor safety record.

Numerous studies of casualty data from the commercial fishing industry have been completed in recent years and all have revealed similar data for causes and effects. In more than two dozen reports conducted over the past 30 years, researchers have identified similar causes, made similar conclusions, and made similar recommendations regarding the commercial fishing industry. Each of these studies was intended to identify specific factors contributing to the highest industrial accident rate in the nation. In the mid-1980's, the combined interests of fishermen (particularly their families and friends) and the public (as consumers and environmentalists), joined forces to petition the Congress for action.

A Coast Guard study completed in 1971 indicated that between 1963 and 1967, an average of 156 U.S. fishing vessels and 83 fishermen were lost each year. Another analysis completed in 1984 showed that between 1970 and 1982, an average of 186 fishing vessels and 98 fishermen were lost annually.

A 1984 Coast Guard report analyzed commercial fishing vessel losses based upon vessel casualty data maintained by the Coast Guard for the years 1970 through 1982. That report included a fatality rate on the order of seven times that of the overall U.S. industry average published by the National Safety Council. This observation caused considerable concern and inspired additional statistical reviews. As a result, a variety of opinions were offered. Commercial fishing industry representatives declared the comparisons to be inappropriate because uninspected commercial fishing vessels were different from other vessels.

A review of recent casualty data indicates that the overall safety record of fishing vessels has not improved despite several programs intended to bring about such changes. The averages for the years 1985 through 1988 were 1304 casualties, \$59.8 million in property damage, 223 vessel total losses, and 106 deaths per year.

Although casualty reporting criteria have varied over the years, the reporting requirements for vessel losses and fatalities have remained constant. Whether justified or not, in some instances insurance premiums were raised and coverage limits lowered while deductible limits were raised. Several marine insurance companies cancelled their policies and abandoned the industry. Lending institutions insisted that vessel owners provide evidence of minimum insurance coverage in order to qualify for loans. The

resulting situation caused fishermen to complain to the Congress that they were being treated unfairly.

An analysis of the causes of these casualties indicates that the largest portion could have been prevented, or their severity greatly diminished, if the operators had known to take a few basic precautions. Reducing casualties caused by human error is a primary purpose of the Coast Guard's licensing program.

Causes which continually surface are failures of the human element. Related failures include the following:

Failure to load or operate the vessel according to its stability guidelines;

Failure to account for structural and/or equipment modifications to the vessel and their effects upon stability characteristics;

Failure to consider dynamic stability factors such as changing weather conditions or sea state and environmental forces which can overwhelm seakeeping capabilities;

Inattention to navigation;

Failure to understand and abide by the rules of the nautical road;

Poor watchkeeping practices while at sea; e.g., everyone asleep, or all hands working at fishing operations while the vessel is underway;

Lack of maintenance and crew inability to correct mechanical problems; and

Failure to recognize safety hazards affecting the vessel or its crew.

Human factors often played a key role in casualties where the direct cause was the failure of some vessel component. Frequently, some required or prudent maintenance was never done or was delayed for some reason. Often, in the case of fires, vessel cleanliness had not been maintained, or hazardous and combustible substances had been improperly stowed.

In 1984, the Coast Guard met with representatives of the commercial fishing industry in the New England area. During discussions on the establishment of professional competency standards, it was the opinion of that group that the Coast Guard's traditional licensing program was inappropriate for their operations. As a result, the Coast Guard discontinued development of a mandatory licensing program for commercial fishermen.

III. A MERCHANT MARINE OFFICER'S LICENSE: PRIVILEGES AND RESTRICTIONS

A federally issued merchant marine officer's license is a formal written statement which certifies that the named individual has been determined to be at least minimally qualified; the individual is therefore authorized to serve in a position of responsibility aboard a vessel subject to Coast Guard jurisdiction.

The license is an authorization to perform duties in certain positions with recognized responsibilities. This authorization may be limited by job title, geographical route, size of vessel, vessel trade, and by type and power of propulsion system.

Without this authority, a person may not legally serve in certain positions of responsibility aboard U.S.-flag vessels subject to Coast Guard jurisdiction.

The authority granted by a license is temporary; the period of validity is 5 years from the date of issuance. A license can be renewed by submitting evidence of continued eligibility.

Merchant marine officer licenses are issued to persons found qualified through procedural requirements intended to demonstrate professional competence.

Merchant marine officers' duties impose certain legal responsibilities (and liabilities) when they perform actions under the authority of their license and, in some situations, when they are merely the holder of the license.

Licenses are issued to persons who, at the time of issuance, have proven that they satisfy certain qualifications established by laws, regulations, international agreements, and Coast Guard policies. These qualifications are composed of a variety of criteria considered essential minimums. They include:

minimum age (maturity, equity, and legal accountability)

U.S. citizenship (legal rights, privileges, and protections intended for citizens)

basic English language skills (an ability to understand verbal orders/instructions and/or give them to others; e.g., standard and emergency voice radio communications plus an ability to understand written data commonly encountered on nautical charts and publications, stability information, meteorological information, maintenance and usage instructions for vessel equipment, etc.)

physical fitness (medically able to perform required duties and make decisions based upon sensory perceptions)

experience (a period of time on-the-job to be exposed to vocational training through hands-on practice and observations)

character and habits of life (an absence of criminal behavior, particularly with regard to violence or substance abuse)

professional qualifications (demonstrate a level of general knowledge of skills and practices directly related to professional competence. This is measured by an examination consisting of subjects considered to be relevant and essential skills to operate a vessel safely, to maintain the vessel and its equipment, and to oversee the safety of its crew)

The Coast Guard reviews and verifies information provided by license candidates in their applications. Part of this process includes an investigation to determine records of convictions for criminal behavior.

A license is prima facie (documentary) evidence that at the time of issuance the holder met at least the minimum standards established by law or regulation for the class of license applied for. (The person may have been qualified for a higher grade or wider scope of license.)

On the date of expiration the license authority is terminated without the possibility of extension. A merchant marine officer's license can be renewed only through application to the Coast Guard. The Coast Guard can renew a license when, and if, the applicant demonstrates continued qualification and skills maintenance. If a license holder does not maintain these qualifications, the Coast Guard may withhold the right to serve under authority of the license.

For an act of negligence or misconduct, determination of incompetence (mental or physical), conviction of a dangerous drug violation, or proof of addiction to a dangerous drug, a license holder may have his/her right to serve under authority of a license suspended or revoked after a hearing before an Administrative Law Judge.

IV. GENERAL PROCEDURES TO UPHOLD PROFESSIONAL COMPETENCY STANDARDS

Raising the professional competency level of commercial fishermen through specially tailored training is the most effective way to improve safety in the industry. The Coast Guard upholds professional competency standards for merchant mariners through a variety of ways. A primary method is the requirement for license applicants to achieve at least minimum scores on written examinations designed to measure professional knowledge. All applicants must successfully complete a comprehensive examination to receive a license. Examination modules are constantly being revised in order to remain current with technology and modern marine practices so that they are valid and reliable test instruments. The time necessary for a license candidate to complete an examination varies with the scope of the license and can range from several hours to several days.

The administrative burden of developing, maintaining, and proctoring licensing examinations, as well as the record-keeping requirements for those actions is cumbersome and resource intensive for the Coast Guard. However, these costs are necessary to uphold present standards and to provide the bases for efficient enforcement.

Another important method used to uphold professional competency standards is vocational course approval authority. Denial of approval or rescinding a previously granted approval are highly effective means to uphold standards. The scope of the review process to grant an approval includes comparisons of standards and procedures applicable to the course curriculum, the instructors who teach it, and the environment of the site at which it is to be taught. Coast Guard course approvals are based upon total course content. This includes the nature and scope of the requirements for students to demonstrate their ability to apply both the theoretical and practical knowledge presented during the course. This requirement is typically accomplished by a final examination. All course curricula must include an examination in order to be approved. The Coast Guard's guidelines for course approvals allow wide latitude to assess student knowledge, and examinations can take a variety of forms.

Once a course approval has been granted by the Coast Guard, the authority to conduct classes is retained by the training entity unless rescinded. Quality of instruction is ensured through periodic visits by the Coast Guard. During these visits, the course is reviewed and compared to standards established in the course approval. If deviations are detected, the Coast Guard can suspend or revoke its course approval and the corresponding authority delegated to the facility to certify students.

V. PREVIOUS COAST GUARD EFFORTS TO IMPROVE COMMERCIAL FISHING INDUSTRY VESSEL SAFETY

Improving safety in the commercial fishing industry has been a long-standing goal of the Marine Safety Program. Previously, in order to best utilize available funding, the Coast Guard's policy supported efforts implemented by the industry on a voluntary basis in lieu of seeking new legislation or regulations requiring additional vessel standards or professional competency standards.

In 1984, the Commandant of the Coast Guard submitted a Fishing Vessel Safety Initiative to the Secretary of Transportation in response to the industry's continued poor safety record. As a result, a Fishing Vessel Safety Task Force was assembled under the direction of the Commandant to implement actions to improve safety. Actions taken by the Task Force included development of a two-part voluntary program to establish vessel standards and safety awareness and education standards. As a voluntary effort, it required no new legislation or regulations to implement. However, because it was voluntary, the program had no funding to help organize and manage it. The Coast Guard supported these voluntary programs primarily through assigning personnel on a part-time basis to assist in the development of manuals and other written safety instructions. In cooperation with the National Oceanic and Atmospheric Administration (NOAA) and the commercial fishing industry, the Coast Guard helped prepare a Vessel Safety Manual and published five Navigation and Vessel Inspection Circulars. In addition, in each of the ten district offices, a Coast Guard officer was assigned collateral duties as Fishing Vessel Safety Coordinator. The duties were to facilitate voluntary programs to inform and educate the fishermen in the hope that their own efforts to improve their knowledge, skills, and abilities would reduce the number of vessel casualties and personnel accidents.

The National Marine Fisheries Service (NMFS), within NOAA, is the federal agency primarily responsible for regulating the commercial fishing industry. NMFS manages funding for programs designed to improve the management and use of marine resources, such as the program providing financial assistance in the form of grants authorized by the Saltonstall-Kennedy Act (S-K). One of the S-K funding priorities in the mid-1980's was improvement of fishing vessel safety. S-K funds provided the necessary resources to organize a variety of voluntary programs dealing with fishing vessel safety, education and training.

Resources made available through the National Sea Grant College program were another integral part of the joint efforts to train and educate commercial fishermen. This is another program managed by NOAA to improve use and conservation of marine resources. The S-K financial assistance program provided significant funding for fishing vessel safety projects that were

supported by additional Sea Grant resources. The scale of several projects would have been much smaller without this combined effort; e.g., training for commercial fishermen, water safety and survival, first aid, cardiopulmonary resuscitation, and others. For the most part, these joint endeavors to develop new training programs were enthusiastically undertaken by both the government and the private training industry.

The limited annual S-K appropriations are designed for use as seed money to develop new ideas and demonstrate the feasibility of support by the private sector for new programs and technology. Between FY83 and FY88, 26 S-K grants totaling almost two million dollars were awarded to various organizations in the private and public sectors to conduct vessel safety training and insurance projects. Since 1988, and to the present time, S-K funding priorities have not included fishing vessel safety and education programs.

NOAA's decision to discontinue priorities for S-K funding for fishing vessel safety, education and training came at a critical time for many of the programs. The combined factors of lack of funding and no specific legislative authority for vessel and personnel standards made Coast Guard efforts to improve safety extremely difficult. The seed money S-K grants had been a unique funding solution for the cooperative efforts of the voluntary programs. Those efforts were just beginning to take effect when constraints of the S-K statute prohibited further funding.

The quality of effort and level of cooperation to develop the voluntary standards were very high among the various interests that had become involved. These interests included members of commercial fishing professional associations, management representatives of commercial fishing companies, educators, members of the training industry, representatives from the insurance industry, marine surveyors, and officials from several federal agencies.

On a national scale, the voluntary programs met with only limited success. Due primarily to the long start-up time, the programs were unable to produce a reduction in the number of vessel casualties. The limited funding did not provide the necessary resources to establish the program sooner or to expand successful programs throughout the industry. Unfortunately, the frequency of vessel casualties and personnel accidents remained at high levels. The marine insurance industry experienced such high loss rates that several companies withdrew from the market. Much of the interest in the voluntary program had been based on an assumption that participants should qualify to receive reduced insurance rates. Despite the fine efforts to develop training tailored to the needs of the fishermen, the insurance crisis that occurred in the mid-1980's nullified that assumption and further detracted from the credibility of the voluntary training programs. The value of safety training alone is not yet recognized by all fishermen. Recent experience has confirmed that many refuse to attend training courses on a voluntary basis.

VI. LEGISLATIVE ASPECTS OF IMPLEMENTING A LICENSING PROGRAM FOR OPERATORS OF COMMERCIAL FISHING INDUSTRY VESSELS

The Coast Guard has examined the existing statutory provisions relating to licensing and manning to determine to what extent these provisions could be applied to operators of commercial fishing industry vessels. The scope of the authority under these provisions in some cases is limited by tonnage thresholds and other operational criteria, as well as inspection status.

Our review of statutory authority focused upon statutory provisions necessary to implement the plan mandated by section 3 of the Commercial Fishing Industry Vessel Safety Act of 1988 with respect to federally documented commercial fishing industry vessels. In order to determine the legislative changes necessary to implement a licensing program, sections 3302, 7101, 8104, 8301, and 8304, of 46 U.S. Code, in particular, were examined.

The 1988 Act characterizes the vessels to which it applies as "uninspected." As a matter of fact, the heading of chapter 45, title 46, U.S. Code is "Uninspected Commercial Fishing Industry Vessels." The vessels covered by chapter 45 are exempted by 46 U.S. Code 3302 (b) and (c) from those categories of vessels subject to inspection in 46 U.S. Code 3301. Existing manning and licensing requirements are, for the most part, imposed only on inspected vessels. As long as commercial fishing industry vessels remain exempt from inspection under the authority of chapter 33, 46 U.S. Code, the authority derived from inspection provisions cannot be used to establish licensing requirements for these vessels.

Matters related to crew complements addressed under 46 U.S. Code, chapters 81 and 83 are not applicable to commercial fishing industry vessels of less than 200 gross tons. These chapters apply to inspected vessels or vessels subject to the Officers' Competency Certificates Convention, 1936 (which applies only to vessels of at least 200 gross tons).

Chapter 71, 46 U.S. Code contains a broad range of authority, including the authority to establish a license for operators of uninspected vessels. This authority would permit the Coast Guard to establish a license for operators of uninspected commercial fishing industry vessels. However, no existing authority allows the Coast Guard to require a licensed operator aboard commercial fishing industry vessels of less than 200 gross tons.

Therefore, in order to obtain statutory authority to implement a comprehensive licensing program, the Coast Guard would have to present to the Congress a legislative proposal requiring that uninspected commercial fishing industry vessels of less than 200 gross tons be operated by licensed individuals.

VII. SUMMARY OF ACTIONS TAKEN TO DEVELOP A LICENSING PLAN

Numerous analyses of the causes of fishing vessel casualties indicate that the human element is a major factor. The primary objective of the Commercial Fishing Industry Vessel Safety Act of 1988 is to reduce the number of vessel casualties and personnel accidents. Section 3 of the Act requires a plan for licensing operators of federally documented commercial fishing vessels. Not surprisingly, some fishermen have expressed an unwillingness to accept a licensing program which they view as "government interference." While the Coast Guard realizes that a mandatory licensing program would establish professional standards with considerable potential to improve safety, expansion of the existing licensing program could come only at significant expense. The Coast Guard's existing licensing program is resource-intensive. In light of the costs involved to impose the existing licensing program on the commercial fishing industry, and recognizing the fishermen's low regard for regulatory controls, the Coast Guard has explored alternative methods to upgrade safety.

Due to limited resources, the Coast Guard has sought ways to reduce costs yet, at the same time, maintain high standards without creating an unreasonable burden for the fishermen. The Coast Guard has expended considerable effort to determine what alternative method to its existing licensing program, if any, could establish professional competency standards with high potential to reduce fishing vessel casualties. The Coast Guard has consulted fishermen, fishing associations, and a variety of related organizations and individuals to obtain their advice and suggestions.

The Coast Guard has consulted the Commercial Fishing Industry Vessel Advisory Committee (CFIVAC) on numerous occasions to discuss possible alternatives. The Coast Guard presented CFIVAC with a tasking statement to obtain specific recommendations regarding professional competency standards, training needs, licensing, and alternatives to licensing.

The Coast Guard has also consulted members of the National Academy of Sciences, Marine Board to seek their recommendations about possible alternatives to the existing licensing program. In addition, in support of the Marine Board's study of commercial fishing vessel safety problems, the Coast Guard obtained information from several other countries about their licensing requirements for commercial fishermen and provided it to the Board.

Coast Guard personnel in charge of each of the 17 Regional Examination Centers (RECs), along with members of their staffs, were consulted during the 1990 Senior Inspector of Personnel Conference about alternatives to the existing licensing program. These people are directly involved in providing Coast Guard licensing services to the public on a daily basis. A special Conference subcommittee contributed to the research effort.

Through Federal Register notices and press releases, the Coast Guard has solicited comments from the public about the existing licensing program and possible alternatives. Press releases were sent to editors of more than 70 trade publications and fishing association newsletters. The Coast Guard asked the public to identify and develop alternatives to licensing persons aboard commercial fishing industry vessels. Vessel size, crew size, geographic region, specific fishery, or any other vessel operating criteria were suggested as possible reasons to require or exempt persons from licensing. Comments were also requested concerning the existing licensing program.

In conducting its research of alternatives to the existing licensing program, the Coast Guard received numerous comments from members of the industry encouraging meetings with the fishermen. The Coast Guard agreed that such meetings could be beneficial for both sides and conducted a series of public meetings at nine locations across the nation between July 11 and August 15, 1990. The comments received in response to all of these research efforts form the basis of the plan to implement professional competency standards for operators of uninspected federally documented commercial fishing industry vessels.

During each of these nine meetings, the Coast Guard presented the four alternatives submitted in response to the 19 December 1989 Federal Register Notice. Members of CFIVAC who attended these meetings presented the alternative that the Committee had developed. Attendance at some of the meetings by fishermen was sparse, although other interests were represented. Many fishermen who came had done so because they were concerned about the costs associated with the newly published equipment requirements in the Notice of Proposed Rulemaking, CGD 88-079, Commercial Fishing Industry Vessel Regulations (55 FR 14924). The majority were there to express their views or to ask about costs. During these meetings it became apparent that many assumed the Coast Guard charged fees for persons to apply for and undergo an examination to receive a license (46 U.S. Code 2110 expressly forbids such activities).

NOTE: Subsequent to these public meetings, Congress eliminated the prohibition of 46 USC 2110 with passage of the Omnibus Budget Reconciliation Act of 1990 (PL 101-508), and directed the Coast Guard to determine appropriate fees for licensing services. Fee schedules are being developed and regulations to implement them are expected to be published early in 1991.

Although costs were the primary matter discussed by fishermen at all nine meetings, they were only one of many issues misunderstood about the existing licensing program. At most of the meetings, questions arose concerning whether the Coast Guard required applicants to attend license preparation courses. Considerable confusion exists because certain marketing practices imply that license applicants must attend a course to qualify to take an examination.

VIII. COMMENTS FROM INDUSTRY, THE PUBLIC, AND THE COMMITTEE

With all the effort to obtain comments from the industry and concerned public, especially to discuss alternatives, the relatively small response may indicate that the objection to licensing may not be as strong as first perceived. In general, the comments received do support some form of regulation. In fact, although there was some opposition, there was an unexpected amount of support for a licensing program administered by the Coast Guard. The vast majority of comments were concerned with what the qualifications and knowledge standards should be and how they could be demonstrated (written examination), not whether there should be a licensing program. Of all the comments received, only four alternatives to the existing licensing program were identified. A fifth alternative was recommended by the Commercial Fishing Industry Vessel Advisory Committee.

General comments about licensing:

The majority of comments discussed the nature and scope of subjects to be included in a commercial fishing vessel operator license examination, not whether a license should be required. Common sense, the exercise of good judgment based upon seagoing experience, and "hands-on" training were factors cited by half the commentators. Many who offered comments expressed a willingness to cooperate with the Coast Guard to develop qualifying criteria and knowledge objectives in establishing minimum professional standards. Both the fishing industry and the training community have expressed a strong willingness to accept these responsibilities.

It is important to recognize the difference between training and licensing. The primary responsibility for training belongs to the commercial fishing industry; it is not a Coast Guard mission. It is the Coast Guard's responsibility to uphold professional seamanship qualifications and performance standards to protect American lives, property and the environment.

The Coast Guard places high value on education and training and recognizes that education and training of fishermen are essential to improve safety in the commercial fishing industry. To support the training industry and encourage license applicants to participate in courses specifically designed for them, the Coast Guard could make broader use of substitutions of successful course completions for sea time. Vocational courses related to almost any type of relevant mariner skills could be allowed as a substitute for sea time requirements. However, minimum experience is not a factor affecting the vast majority of commercial fishermen - they have more than enough sea service to qualify for licenses under the existing program.

Formal education is not required under the existing licensing program. License examinations are designed to measure a person's practical abilities directly related to professional competence to a degree beyond perfunctory knowledge. For a variety of practical reasons, (e.g., objectivity, record-keeping, uniformity, standardization, fairness, costs, time, etc.) a written examination is the primary means by which the Coast Guard measures a candidate's professional knowledge. Professional knowledge topics span a broad spectrum of subjects. The subject areas tested are considered to be relevant, and related directly to essential skills. The examination ensures at least baseline levels of knowledge, skills, and abilities to operate a vessel safely, maintain the vessel and its equipment, and oversee the safety of its crew.

Among the comments about the existing licensing program, there was a common concern expressed as a sense of anxiety about having to pass a written examination. Many commentators recommended that the Coast Guard accept alternative methods to a written examination for demonstrating knowledge and abilities; e.g., hands-on practical exercises.

The Coast Guard presently operates 17 RECs at major ports, but many of these sites are not hubs of commercial fishing activity. A large number of comments concerned the inconvenience associated with the limited number of RECs and costs associated with travel and lodging.

ALTERNATIVES IDENTIFIED BY THE COMMENTS:

1. The Coast Guard should authorize state agencies to endorse state-issued motor vehicle driver's licenses with authorization to operate commercial fishing industry vessels.
2. The Coast Guard should empower the insurance industry to require operators of commercial fishing industry vessels to attend Coast Guard-approved training courses, "workshops," or seminars as a condition for coverage.
3. The Coast Guard should accept diplomas or certificates of completion for attendance at certain Coast Guard-approved training courses, "workshops," seminars, etc., as a substitute for Coast Guard-issued licenses.
4. The Coast Guard should create new license categories within the existing system for persons operating uninspected commercial fishing industry vessels of less than 200 gross tons.

Alternative recommended by the Commercial Fishing Industry Vessel Advisory Committee:

5. The Coast Guard should create and administer a new three-tiered licensing scheme for persons in charge of uninspected federally documented commercial fishing vessels of less than 200 gross tons (GT). The scope of license and minimum number of licensed persons required in the crew are to be based upon two primary criteria: vessel length and total number of persons on board (POB).

Credentials would be issued to persons who had attended training that included hands-on instruction.

Credentials would be subject to suspension or revocation proceedings just as Coast Guard-issued licenses are.

Credentials would be valid for five years and require renewal, including a short refresher course in personal survival.

Vessel Class	Vessel Size	Qualified Personnel
A	< 79 ft and < 200 GT	Operator
B	≥ 79 ft, < 200 GT, and < 16 POB	Master, and Certified Fisherman
C	≥ 79 ft, < 200 GT, and ≥ 16 POB	Master, Operator, and Certified Fisherman

The Committee recommends the following as minimum abilities:

Certified Fisherman

basic collision prevention rules
basic seamanship
speak and understand English
visual acuity including differentiation of colors
certification from a CG-approved personal survival course

Operator

basic navigation
basic collision prevention rules
basic seamanship
speak and understand English
visual acuity including differentiation of colors
certification from a CG-approved personal survival course
current certification for cardiopulmonary resuscitation
current certification for first aid
minimum experience shall be six months of sea time

Master

extensive knowledge of collision prevention rules
navigation skills, including electronic appliances
seamanship
stability
fire prevention and control
fishing vessel regulations
weather
speak and understand English
visual acuity including differentiation of colors
certification from a CG-approved personal survival course
current certification for cardiopulmonary resuscitation
current certification for first aid
minimum experience shall be two years of sea time

IX. ESTIMATES OF COAST GUARD RESOURCE NEEDS TO LICENSE OPERATORS OF COMMERCIAL FISHING INDUSTRY VESSELS

In order to implement a licensing program for operators of federally documented commercial fishing vessels of less than 200 gross tons, the Coast Guard estimates it will cost approximately \$1,800,000 and require 34 additional billets or positions. Explanations of how these costs were calculated are included below. Estimates were made of the expected changes in Regional Examination Centers' work loads.

- A. It is estimated that initial implementation will require the issuance of approximately 36,200 licenses.

A comparison of National Marine Fisheries Service (NMFS) data and Coast Guard MSIS vessel documentation data indicates a total population of federally documented commercial fishing vessels to be approximately 30,000.

Approximately 250 of the federally documented vessels are larger than 200 gross tons and already require licensed operators. (30,000 - 250 = 29,750)

Additionally, approximately 10% of the vessel operators already hold licenses.

$$29,750 \times (0.1) = 2,975 \quad \rightarrow \quad 29,750 - 2,975 = 26,775$$

The federally documented vessel population must be further adjusted by considering the number of licensed persons aboard each vessel based upon length of voyage. According to conventional practices, the manning complement for a vessel which operates less than 12 hours for a limited distance, could include only one licensed operator. It is estimated that 65% of the federally documented vessels would require only one operator. For the remaining 35%, a two-watch system would be appropriate.

65% and 35%:

$$\begin{aligned} [(26,775 \times .65) \times (1)] &+ [(26,775 \times .35) \times (2)] = \\ (17,400) &+ (18,745) = 36,150 \end{aligned}$$

Therefore, assume that of the persons presently employed in the industry as operators, approximately 36,200 who do not already hold a license will require one.

- B. Coast Guard licensing officials are available 1,738 hours per year or, 217.25 days per year.
- C. The estimated average annual cost to the federal government for each Coast Guard licensing official is \$35,417.
- D. The Coast Guard assumes that the number of license transactions for all existing licensing programs will remain constant.
- E. On average, 6 Coast Guard staff hours are required to issue an original license or to upgrade a license. Of this time, administrative processes include 1 hour for record maintenance, certificate preparation and related procedural matters, and 5 hours are necessary to proctor and score a written examination (an oral examination requires 6 hours).

Note: It is common practice for one Coast Guard licensing official to proctor more than one examination simultaneously. The number of applicants that one official can handle simultaneously is limited. For this analysis we have considered the capacities of the REC testing facilities and assume that the average number of applicants per official per day is 8.

- F. The following resource requirements are estimated for original issues; i.e., the one time requirement for 36,200 new licenses:

36,200 applicants v 8 applicants per official per day
= 4,525 examination proctoring days.

4,525 days v 217.25 days per official
= 20.83 → 21 officials.

21 officials x \$36,000
= \$756,000 per annum.

In addition, a criminal records check to receive an original license costs the Coast Guard \$17 per applicant;
\$17 x 36,200 = \$615,400.

- G. Also to be considered with the resource requirements for the existing population (36,200), are the requirements necessary to accommodate those persons who subsequently join the industry as new entrants. Based upon NMFS data for 1987-8, the number of federally documented vessels engaged in the commercial fisheries increased by an estimate of 2,700. Applying the various types of adjustments as made in paragraph A above yields an additional 3,300 original licenses to be issued.

2,700 - 10% for those vessels of 200 gross tons and greater
= 2,430 vessels.

65% and 35%:
[(2,430 x .65) x (1)] + [(2,430 x .35) x (2)] =
(1,580) + (1,701) = 3,281
Assume 3,300 applicants.

3,300 applicants v 8 applicants per official per day
= 412.5 examination proctoring days.

412.5 days v 217.25 days per official per year
= 1.9 → 2 officials

2 officials x \$36,000 = \$72,000 per annum.

Criminal records checks; \$17 x 3,300 = \$56,100 per annum.

- H. In addition, it is assumed that a portion of the operators will seek to upgrade their licenses. It is estimated that 10% of the population upgrade their licenses annually.

(36,200 + 3,300) x (0.10) = 3,950 licenses upgraded annually.

3,950 licenses x 2 hours per renewal
= 7,900 staff hours annually.

7,900 staff hours v 1,738 hours per year
= 4.5 staff years.

4.5 staff years x \$36,000 = \$162,000 per annum.

- I. The time required per license renewal (every five years) is estimated to be 2 Coast Guard staff hours. The following resource requirements are estimated for renewals as a continuing annual requirement.

(36,200 + 3,300) licenses v 5
= 7,900 licenses renewed annually.

7,900 licenses x 2 hours per renewal
= 15,800 staff hours annually.

15,800 staff hours v 1,738 hours per year
= 9.1 staff years.

9.1 staff years x \$36,000 = \$327,600 per annum.

- J. Presently there are 114 authorized billets at the 17 Regional Examination Centers to handle licensing of merchant marine officers and certification of seamen. It is estimated that the addition of the above work load requirements would have the following effects:

In order to issue all the original licenses required, it would require 30 additional licensing officials exclusively dedicated to a commercial fishermen program. The estimated cost for implementation is \$1,582,642 per year.

In order to maintain all the licenses issued, i.e., through renewals, upgrades, and duplicate issues would require an additional 14 billets exclusively dedicated to a commercial fishermen program at the RECs. The additional cost is estimated to be \$544,000 per year.

- K. Because the population of commercial fishermen is not evenly distributed, some RECs will have a higher demand for services than others. The RECs at Seattle, Anchorage, Juneau, Boston, Houston, and New Orleans would be affected the most. The costs of securing additional facilities or extending authorized work schedules at the RECs to accommodate the increased demand for services is beyond the scope of this analysis. Experience has demonstrated that an additional 30 staff year work load distributed to several RECs would necessitate more than 30 people to accomplish the program goals.

X. DISCUSSION OF ALTERNATIVES

The alternatives identified have been evaluated to determine the extent to which they meet four general criteria. The primary criterion is the ability of an alternative to uphold the minimum eligibility standards of existing statutes. If an alternative lacks such an ability, the shortfall then creates a requirement for legislative changes. These changes would have to adjust the existing minimum standards or allow exemptions to them. The second criterion is the Coast Guard's ability to enforce the alternative. The Coast Guard wants to accommodate both the needs of the commercial fishing industry and its own programs to improve safety. If an alternative cannot be enforced easily through existing measures, either additional resources must be obtained, existing policies must be changed, or the concept must be rejected. The third criterion is the estimated cost of enforcement and the fourth criterion is whether the anticipated results would be responsive to the needs of the fishermen they are intended to protect.

1. **Require state agencies to endorse state-issued motor vehicle driver's licenses with specific authorization to operate commercial fishing industry vessels after the holder has successfully completed state-approved training.**

Discussion. This alternative's potential to improve safety is directly dependent upon the reliability and validity of the professional standards imposed by the states. At present, there are three states with programs to certify boating safety knowledge for recreational boat operators: Connecticut, New Jersey, Maryland, and, possibly in the future, Florida. The intent of these states' programs is to mandate familiarization with Collision Prevention Regulations, basic seamanship, and substance abuse.

Ability to uphold existing minimum standards. A state's authorization to operate a vessel is limited to state-numbered pleasure craft within certain horsepower limits and upon waters of exclusive state jurisdiction. Present qualifications necessary to obtain the states' authorization are limited to the applicant's meeting minimum requirements for residency, minimum age, and satisfactory attendance at a course approved by the state boating agency. The states do not enforce eligibility standards for experience, character, medical fitness (besides visual acuity), English language ability, or U.S. citizenship.

Coast Guard ability to enforce. In the three states with these programs, education certificates are not considered the legal equivalent to driver's licenses - they are valid for life, and cannot be revoked. These circumstances would negate enforcement measures via suspension and revocation procedures. For the most part, jurisdiction is limited to state residents when they operate upon "non-tidal" state waters aboard state-registered pleasure (non-commercial) vessels, and while this geographic

jurisdiction is not exclusively inland, it does not extend beyond the Territorial Sea (generally, 3 miles from shore) to the limits of the Exclusive Economic Zone (200 miles). Unless additional geographic jurisdiction is granted to the states, the alternative cannot be enforced by state authorities. A state driver's license alternative would be enforceable only if all the states involved agreed to participate and only after obtaining necessary authority and funding via the state legislatures. Until reciprocity for state requirements is established for all states, effective enforcement is impossible.

Regulation of commercial vessels under the statutory authorities created for recreational boating safety programs would necessitate major changes in administration and enforcement policies for all states. This would require federal legislation to grant such authority and would necessitate additional state legislative initiatives. Even with additional enforcement authority, unless the states obtained additional resources to establish and maintain a physical presence, their enforcement capabilities would be very limited.

Programs administered by the states lack authority to compel compliance with the federal drug and alcohol screening requirements. Casualty statistics strongly indicate that drug and alcohol screening are matters of particular importance in reducing the number of casualties. The Commercial Fishing Industry Advisory Committee recommended that any program authorized by the Coast Guard should include drug and alcohol screening requirements equivalent to those for license holders under 46 CFR Parts 4, 5, and 16.

Responsive to needs of fishermen. There are presently no vessel training and education programs administered by states which are designed for operators of commercial fishing vessels. In the three states that enforce training and education requirements, the curricula are specifically directed at recreational boating safety. The emphasis is on learning objectives that are very different from those related to causes of fishing vessel casualties. The time necessary for the states to establish resource capabilities to train commercial fishermen is estimated to be several years.

Fishermen must presently deal with one of 17 RECs to obtain an original license or to upgrade a license. Licensing procedures modeled after those to obtain a state motor vehicle driver's license could provide good accessibility to services for fishermen. If the state administrative requirements could be satisfied at any state agency authorized to issue a driver's license, fishermen could easily comply.

Costs. Coast Guard funding of state recreational boating safety programs amounted to more than \$27 million for FY90. However, the language of Chapter 131 of 46 U.S. Code which authorizes grants to the states precludes the use of those funds for

purposes other than recreational boating safety programs. Unless additional funding is provided, the concept of having the states assume testing and administration responsibilities to ensure at least minimal professional competency standards for commercial fishermen is not feasible. States are extremely reluctant to proceed in this direction if it places their federally-provided funds for recreational boating safety in jeopardy.

This alternative suggests considerable cost avoidance for the Coast Guard. However, it would be dependent upon the cooperation and coordination of 23 coastal states. The Coast Guard and the states remain manpower-limited. Costs to the individual fishermen would not seem burdensome, but the costs to the states are estimated to be very high. In recent discussions with the Coast Guard about other programs involving joint funding, the states have expressed strong resistance to assuming any additional responsibilities from the federal government without commensurate funding. The viability of this alternative is dependent upon extensive funding by the federal government without any appreciable cost savings over a federal program.

Whether this alternative would influence the costs of hull or protection and indemnity insurance is uncertain. None of the commentors identified a premium reduction for their commercial vessel insurance based upon participation in a recreational boating safety course. Several commentors said that they remained frustrated in their efforts to obtain insurance at lower costs even after providing additional equipment and/or participating in training. Most commercial fishermen cannot afford a viable insurance package even at a reasonable cost. This problem is not limited to hull and machinery alone; one must also consider the personal indemnity aspects of a total insurance program.

If federally funded, the costs to the federal government would be high, with no enforcement value beyond the jurisdictional limits of state waters. The time necessary to obtain legislative and regulatory change actions is estimated to be from 5 to 10 years. Meanwhile, current federal standards based upon statutory requirements for a license could not be enforced.

2. The Coast Guard should empower the insurance industry to require operators of commercial fishing industry vessels to attend Coast Guard-approved training courses, "workshops," or seminars as a condition for coverage.

Discussion. This alternative's potential to improve safety is dependent upon an ability to compel commercial fishermen to obtain and maintain insurance. This alternative strives to improve the level of professional knowledge of persons who operate insured commercial fishing industry vessels.

Ability to uphold existing minimum standards. Without statutory authority to compel insurance, this alternative's ability to uphold existing minimum standards is limited to operators of insured vessels. It has been estimated that as many as half of the commercial fishermen operate without insurance. Many of the small, older vessels are owned outright by their operators. The enforcement mechanisms of loan denial or repossession are not factors in the owners' decisions to obtain insurance. Many commercial fishing vessel owners operate without insurance because they cannot afford it or don't believe insurance is cost effective even if offered at prices they can afford.

Coast Guard ability to enforce. Neither the Coast Guard nor any other federal agency has the authority to compel vessel operators to obtain vessel insurance. In 1988, when PL 100-424 was being developed, a primary force driving federal legislation was Congressional concern that fishermen be able to obtain insurance at affordable rates. An essential part of the legislative concept was the establishment of limits of liability. Efforts to establish liability limits and to reform marine litigation practices were not successful. As a result, all portions of the Act pertaining to insurance were eliminated. In light of these recent events concerning matters of insurance, it is highly unlikely that similar legislative efforts would be successful today. Without legislative authority to compel insurance coverage for all commercial fishermen, the concept of delegating authority to insurance companies to require their clientele to attend training programs specified by the carrier as a condition of coverage is not viable.

Responsive to needs of fishermen. This alternative is more responsive to the needs of the insurance industry than to the needs of fishermen. Most lending institutions require insurance as a condition of vessel financing, and failure to maintain coverage may be construed as default of the loan agreement. If a mortgagee defaults, in most situations the lending institution will consider repossession of the property. The commercial fishing industry has experienced an insurance crisis which resulted in premium costs so high that many vessel operators found themselves able to afford only the mortgage or the insurance, but not both. Lending institutions are well aware that repossession proceedings cost money and that used boats are not easily marketable in today's environment. Given the choice of receiving payment of the mortgage or incurring costs to enforce an insurance requirement, lending institutions have usually chosen only to insist upon payment of the mortgage.

Costs. The costs of this alternative would be borne solely by those who purchase insurance. Attending training courses as an additional requirement for fishermen to obtain insurance may be sufficient aggravation to convince fishermen to forego the purchase of insurance. This alternative may force some commercial fishermen to seek an insurance company that does not require training as a condition of coverage.

3. The Coast Guard should accept diplomas or certificates of completion for attendance at certain Coast Guard-approved training courses, "workshops," seminars, etc., as a substitute for Coast Guard-issued licenses.

Discussion. This alternative's potential to improve safety depends primarily upon the Coast Guard's ability to require existing statutory licensing standards to apply to any diplomas or certificates that would be issued under this alternative. As presented, this alternative would necessitate several legislative changes without which suspension and revocation proceedings, drug and alcohol screening requirements, and character and habits of life standards could not be enforced.

Ability to uphold existing minimum standards. For the Coast Guard to delegate permission to the private sector to train, test, and certify that license applicants have met certain standards requires no additional legislative authority. However, unless the certificates could be considered the legal equivalent of a Coast Guard-issued license, several enforcement policies would be weakened.

However, there is a way to modify this alternative to allow third-party participation, reduce Coast Guard costs, and still enforce all existing statutory standards. The Coast Guard could adopt a policy to recognize training certificates as compliance with professional standards. This modification of the alternative creates a circumstance of shared responsibility to uphold minimum standards. Third-party certification would establish partial eligibility to obtain a license. All other eligibility requirements to obtain a license could continue to be enforced by the Coast Guard.

As a federal law enforcement agency, the Coast Guard has access to information maintained by other law enforcement agencies. The Coast Guard upholds statutorily-required minimum eligibility standards with this information. The Coast Guard cannot delegate authority to private industry to access these records. Without a similar ability to investigate applicants' backgrounds, private industry would be unable to uphold these statutory requirements. If this alternative is modified to address third-party certification of professional competency as noted above, the Coast Guard could maintain these standards for licenses issued to commercial fishermen.

Coast Guard ability to enforce. For years, the Coast Guard has had requirements for compulsory attendance at specific vocational training courses as a qualification for a license. Radar, first aid, CPR, flashing light signaling, and firefighting are examples. An extension of this concept of third-party certification of professional competency would create the means necessary to issue licenses to commercial fishermen while still upholding all present standards.

Responsive to needs of fishermen. Among the comments received which addressed the Coast Guard's existing licensing program, there was a common concern expressed as a sense of anxiety about having to pass a Coast Guard-administered examination, particularly a written one. As modified, this alternative would pass to the third-party the responsibility for students to demonstrate knowledge of professional skills. How they satisfy this requirement could include a range of techniques submitted by the third-party trainers for approval by the Coast Guard. Through its course approval authority, the Coast Guard could continue to enforce the requirement for license applicants to demonstrate knowledge and ability. Third-party trainers would have great flexibility to develop demonstrations of ability to satisfy this requirement. Training could be taken a step further to allow a hands-on demonstration of ability as a substitute for a written examination. The law specifically allows an individual to take an oral examination for a license authorizing service aboard an uninspected fishing vessel. This proviso could also be utilized by third-parties.

Costs. To maximize cost avoidance measures, it would be vital for the Coast Guard to limit the authority to certify professional competency of commercial fishermen exclusively to third-parties. Unless it could do so, the Coast Guard would still have to maintain examinations for these license categories to deal with those fishermen who elect to challenge the examination without attending an approved course. This would negate the entire effort to avoid costs. Exclusive recognition of third-party certification of professional ability would allow the Coast Guard to avoid resource expenditures for these same matters.

Some of the costs the Coast Guard could avoid with this modified alternative would be transferred to the commercial fishermen. At present, costs for fishermen to attend voluntary instruction vary due to a number of factors. Among them are tuition, reference materials, travel, lodging, and per diem. If a large number of third-party training authorities developed, there should be cost savings for fishermen based on time and effort necessary to obtain the necessary training to qualify for a license. Fishermen should save costs associated with travel, lodging, and lost time to visit one of the 17 RECs.

This alternative offers cost avoidance opportunities for the Coast Guard but at the same time it creates an additional work load. With the exception of examination activities, all other administrative tasks and costs currently necessary to issue a license would remain the same. Additional resources would be necessary to perform all administrative tasks necessary to establish the program, but the alternative suggests economies of scale would be possible; e.g., consolidation of resources at a single site to accomplish application reviews.

Further development of this concept will depend largely upon market forces beyond the Coast Guard's control. The Coast Guard does not exercise any control over what training authorities charge for their services. Present costs for industry-sponsored courses vary with length of time involved and the specific nature of instruction. The most cost effective option for the Coast Guard to implement would be to require attendance at an approved course in order to receive certification of professional ability to qualify for a license. This would require a regulatory change to 46 CFR Part 10. Fishermen would have to deal with the private training industry to obtain the necessary certification.

A program administered by private industry to train and certify compliance with certain minimum standards should help meet the needs of the fishing industry, and has high potential to make training courses more convenient to the fishermen. In conjunction with Coast Guard oversight and issuing authority, such a framework could ensure a reasonable level of safety and reduce the number of casualties. This in turn would result in reduced Coast Guard costs for search and rescue. The alternative could be implemented in a relatively short time and should have a positive impact on the industry's safety record. The industry and the training community are both willing to take action.

4. The Coast Guard should create new licenses for persons who operate uninspected commercial fishing industry vessels of less than 200 gross tons.

Discussion. This alternative's potential to improve safety depends upon the continued reliability and validity of the professional competency standards imposed by the Coast Guard. The extent to which those standards directly address the causes of casualties and impart an awareness of prevention will determine the program's effectiveness.

Ability to uphold existing minimum standards. All current standards required by statute would remain in force without change. A legislative change would be necessary to obtain authority to require licensed individuals aboard commercial fishing industry vessels of less than 200 gross tons.

Coast Guard ability to enforce. Enforcement policies would remain unchanged. The resources required to carry out this alternative would increase substantially. To enforce the current standards for issuance of a license, the Coast Guard administers an examination to qualified applicants. To prepare for the examination, an applicant may elect to attend a preparatory course or study the applicable references on his/her own. The Coast Guard measures an applicant's professional knowledge by the examination scores. Each topic has a minimum passing score that the applicant must meet.

The examination requirements administered by the Coast Guard allow applicants flexibility to develop skills and obtain knowledge through a variety of means, including informal self-study, participation in a formal marine education program at an accredited institution, or undertake a correspondence course. The Coast Guard does not mandate how applicants must prepare for the examination. The bottom line for the Coast Guard is an objective evaluation of knowledge compared to recognized standards.

Responsive to needs of fishermen. Commentors submitting alternatives rejected the status quo by a rate exceeding 2 to 1, and supported some type of program to establish professional competency. Twenty-five percent of these comments suggested that the Coast Guard should require mandatory training to obtain a license; 13 percent suggested some type of voluntary training should be a prerequisite to receive a license; and, 23 percent stated that the existing license program was adequate and should be used for the commercial fishing industry.

The Coast Guard places high value on education and training and is convinced that they are essential to improving safety in the commercial fishing industry. The Coast Guard is aware that many fishermen have been opposed to government regulation, especially a licensing program, which they view as interference. The Coast Guard also recognizes that without a regulatory requirement to compel attendance, many fishermen will not attend vessel safety training. The Coast Guard's traditional licensing program, with services delivered at 17 RECs, could be a burden for the industry as well as the Service. Depending upon the distance traveled, the costs for travel, lodging, and per diem are estimated to be \$350. However, these costs do not account for tuition at a vocational training course, license preparation course, or for training to obtain certification in first aid and CPR.

Costs. For this alternative, the costs in money, time, and effort to develop, maintain, and proctor license examinations would be considerable. Cost is the primary reason the Coast Guard has sought alternatives to its traditional program, which has become unwieldy and resource-intensive. During recent years, the Coast Guard has implemented several projects to streamline procedures to lessen resource requirements while maintaining high standards for professional competency and eligibility. Creating new licensing requirements, particularly the examinations and examination addenda to maintain existing standards, are steps in the opposite direction from recent cost reduction actions.

Coast Guard resource requirements to license commercial fishermen, in a manner to ensure a reduction in the industry's casualty rate, make this alternative very costly. The additional work load for the Coast Guard would be very high if all administrative tasks and costs currently necessary to issue a license remain constant. Additional resources would be essential to perform all administrative tasks necessary to establish and

maintain the program. The Coast Guard would have to develop appropriate examinations for licenses to authorize service aboard uninspected commercial fishing industry vessels. The Coast Guard would also have to develop specially-tailored examination addenda for persons who already hold a license. These activities related to examination procedures to establish professional competence are the direct causes of high costs.

All course approvals are done at Coast Guard Headquarters by the Merchant Vessel Personnel Division. To provide procedural fairness to the training industry, the Coast Guard publishes course approval guidelines. There are currently no Coast Guard-approved courses that could enforce this alternative. The course approval staff estimates a 500% long-term increase in its work load to implement this alternative.

The primary disadvantage of this alternative is the cost to the Coast Guard to handle this increase in work load. During FY90, the Coast Guard issued licenses to approximately 40,000 mariners. The actions to license operators of commercial fishing industry vessels represent more than a 100% increase in the existing program's total work load. For this reason, the alternative is too resource-intensive to be feasible without substantial increases in assets.

5. RECOMMENDATION OF THE COMMERCIAL FISHING INDUSTRY VESSEL ADVISORY COMMITTEE

The Coast Guard should create and administer a new three-tiered licensing scheme for persons in charge of commercial fishing vessels based upon two primary criteria: vessel size (79 feet length) and the total number of persons on board (16).

Discussion. This alternative's potential to improve safety depends primarily upon the effectiveness of the criteria substituted for existing standards and the Coast Guard's ability to enforce them. This alternative includes no requirement for U.S. citizenship. It recommends that the Coast Guard require certain skills and abilities currently not required for other licenses of similar scope, and recommends that licenses be issued without requiring demonstration of skills and abilities vital to safe vessel operation. This alternative recommends sea service requirements that are different from those existing for licenses of similar scope. It also recommends that knowledge and ability standards, as well as manning standards, be based upon two risk criteria which are different from the Coast Guard's existing licensing program.

Ability to uphold existing minimum standards. For the Coast Guard to implement this alternative would require significant statutory and regulatory changes to amend the existing minimum eligibility standards. Citizenship has long been a requirement for persons to serve in command of documented vessels. Requiring citizenship to qualify for a license places no unfair burden upon the fishing community. Congress required this plan to address licensing of persons operating documented commercial fishing industry vessels; citizenship is a basic requirement for persons to obtain a license. The status of citizenship guarantees legal rights, privileges and protections. Congress has established behavioral standards for license holders which impose legal responsibilities (and liabilities) when they perform actions under the authority of their license and, in some situations, when they are merely the holder of the license (e.g., convictions for drug usage or driving while intoxicated).

The primary evaluation criterion for all alternatives is the potential to reduce the number of fishing vessel casualties. This alternative does not include minimum age or experience requirements for "certified fisherman" and recommends only six months' experience as a minimum to obtain a license as "Operator." Based upon decades of experience, the Coast Guard has confirmed the validity and reliability of minimum age and sea service standards as essential qualifications for a license. Current eligibility requirements for licenses of similar scope require at least two years' experience and 18 years of age. These requirements are not considered to be unfair or unreasonable if applied to persons who operate uninspected federally documented commercial fishing vessels.

Coast Guard ability to enforce. This alternative would require the Coast Guard to obtain statutory authority to exempt fishermen from citizenship requirements. The Coast Guard would have to complete several regulatory projects in order to change existing professional standards.

The two applicability criteria included with this alternative are significantly different from existing standards. The present program enforced by the Coast Guard provides career ladders for upward mobility. The vessel length criterion of 79 feet and the total number of persons on board criterion (16), are different from all other licenses which are based upon gross tonnage. In considering the nature and variety of U.S. fisheries as the Congress directed, the Coast Guard has found no 79-foot design class of vessel identified, nor was 16 an essential crew complement. Allowing the recommended substitution would create unnecessary confusion and a need for new conversion standards to evaluate experience for a license to be upgraded.

Responsive to needs of fishermen. This alternative recommends knowledge and abilities to receive a license as a "certified fisherman," which do not include navigation, meteorology, or basic stability. The Coast Guard considers these skills essential to safe vessel operation and preventing vessel casualties. Commercial fishing vessel casualty statistics indicate that the greatest cause of fishing vessel tragedies is human error stemming from a lack of knowledge of stability, navigation, or weather.

For each of the three new licenses it would create, this alternative recommends knowledge and abilities which exceed current regulatory requirements. The current licensing regulations applicable to persons serving aboard vessels of less than 200 gross tons do not require skills related to personal survival. In order to authorize these additional requirements, the Coast Guard would have to first complete a regulatory project.

Costs. The resources necessary to implement this alternative would be considerable. Because the Coast Guard would be the licensing authority, there would be no cost avoidance associated with this alternative. Work loads and resource requirements for the RECs and Coast Guard Headquarters would increase considerably. The time and effort to process necessary statutory and regulatory changes would be substantial.

XI. THE PLAN FOR LICENSING OPERATORS OF FEDERALLY DOCUMENTED COMMERCIAL FISHING INDUSTRY VESSELS

A. Initiative Requirement.

This plan was developed in response to section 3 of Public Law 100-424. Section 3 requires that:

The Secretary of the department in which the Coast Guard is operating shall, within two years after the date of enactment of this Act, and in close consultation with the Commercial Fishing Industry Vessel Advisory Committee established under section 4508 of title 46, United States Code (as amended by this Act), prepare and submit to Congress a plan for licensing operators of documented fishing, fish processing, and fish tender vessels. The plan shall take into consideration the nature and variety of the different United States fisheries, the need to license all operators or only those working in certain types of fisheries or vessels, and other relevant factors.

B. Background.

In close cooperation with the Commercial Fishing Industry Vessel Advisory Committee, the Coast Guard has developed this plan for licensing persons who operate commercial fishing industry vessels. This plan has considered the nature and variety of different fisheries, the need for licensing some or all of the personnel aboard vessels in the industry, and other relevant factors. Most importantly, this plan has considered the actions necessary to reduce the number of commercial fishing vessel casualties.

C. Methodology.

While considering the various fisheries and vessel types that might be affected by licensing requirements, the Coast Guard requested comments from fishermen, industry representatives, and any interested members of the public. The Coast Guard asked for alternatives to the existing licensing program and for any basis to exempt a type of vessel or a particular fishery from licensing requirements. In addition, the Coast Guard presented a tasking statement to the Commercial Fishing Industry Vessel Advisory Committee, requesting them to consult with their various constituencies and develop an alternative to the existing licensing program. The Coast Guard conducted public meetings at nine sites across the nation and asked the fishermen for their response to the alternatives identified by earlier comments and the Commercial Fishing Industry Vessel Advisory Committee. No segment of the industry demonstrated a safety record which deserved an exemption from a licensing requirement. Based upon all comments received, the Coast Guard performed a decision analysis which compared each alternative to standard performance criteria.

The alternatives identified have been evaluated to determine the extent to which they meet four general criteria. The primary criterion is the ability of an alternative to uphold the minimum eligibility standards of existing statutes. If an alternative lacks such an ability, the shortfall then creates a requirement for legislative changes. These changes would have to adjust the existing minimum standards or allow exemptions to them. The second criterion is the Coast Guard's ability to enforce the alternative. The Coast Guard wants to accommodate both the needs of the commercial fishing industry and its own program's need to improve safety. If an alternative cannot be enforced easily through existing measures, either additional resources must be obtained, existing policies must be changed, or the concept must be rejected. The third criterion is the estimated cost of enforcement and the fourth criterion is whether the anticipated results would be responsive to the needs of the fishermen they are intended to protect.

D. Alternatives identified by the comments and considered during development of the plan:

1. The Coast Guard should authorize state agencies to endorse state-issued motor vehicle driver's licenses with authorization to operate commercial fishing industry vessels.
2. The Coast Guard should empower the insurance industry to require operators of commercial fishing industry vessels to attend Coast Guard-approved training courses, "workshops," or seminars as a condition for coverage.
3. The Coast Guard should accept diplomas or certificates of completion for attendance at certain Coast Guard-approved training courses, "workshops," seminars, etc., as a substitute for Coast Guard-issued licenses.
4. The Coast Guard should create new license categories within the existing system for persons operating uninspected commercial fishing industry vessels of less than 200 gross tons.
5. The Coast Guard should create and administer a new three-tiered licensing scheme for persons in charge of commercial fishing vessels based upon two primary criteria: vessel size and number of persons aboard.

E. Recommendation.

In order to balance concerns for costs with maximizing potential to reduce fishing vessel casualties, the Coast Guard intends to adopt Alternative 3 with modifications:

1. The Coast Guard will adopt a policy of shared responsibility with private industry to uphold minimum eligibility standards.
2. The Coast Guard will publish guidelines for curricula to be approved and will periodically review adherence with those guidelines.
3. Third-party certification will establish partial eligibility to obtain a license to operate commercial fishing industry vessels of less than 200 gross tons.
4. The authorization to test and certify professional abilities to obtain a license to operate commercial fishing industry vessels of less than 200 gross tons will be granted exclusively to third-parties.
5. Applicants must satisfy all other eligibility requirements enforced by the Coast Guard to obtain a license.

F. Rationale.

The Coast Guard has traditionally required a comprehensive final examination in order to issue a license. The intent of this requirement is to ensure applicants can demonstrate a minimum knowledge of a variety of subjects relevant to vessel operations. Where the applicant obtains the knowledge has been, and would continue to be, the applicant's choice. Through its course approval authority and by periodic visits to training sites, the Coast Guard has exercised quality control of curricula allowed as a substitute for sea time or a specific technical skill requirement. Because of changes in vessel technology, the Coast Guard has accepted certification from third-party training authorities for a few special skills. As recommended by the Commercial Fishing Industry Vessel Advisory Committee, the Coast Guard will expand these policies to allow third-party training authorities to certify the professional abilities of commercial fishermen. This alternative builds upon existing programs which have been developed in cooperation with the fishing industry. The Coast Guard will develop practical standards for training and evaluations in close consultation with the industry, and continue to exercise quality controls through its course approval authority and periodic site visits.

Based upon the comments presented by persons attending the public meetings, along with written comments submitted, there is good evidence that many members of the industry feel that licensing is not only appropriate, but necessary and justified. Some form of regulation was supported by a large portion of the persons who submitted written comments or attended the meetings. Although there was some opposition, there was an unexpected amount of support for a licensing program administered by the Coast Guard.

The vast majority of comments were concerned with whether a Coast Guard-administered comprehensive written final examination would be required. Although the law provides for oral examinations, concerns about professional qualifications, experience and knowledge standards were secondary to the requirement for an examination. The concerns evolved to whether the Coast Guard would be able to issue a license based upon private third-party instruction and testing, without requiring its own examination, not whether there should be a licensing program.

G. Applicability.

This plan applies to all persons who operate federally documented, uninspected commercial fishing vessels, fish processing vessels, and fish tender vessels to which licensing requirements do not presently apply. The Coast Guard estimates the present population of vessel operators affected by this plan to be approximately 36,000. Persons who operate state-numbered vessels will not be affected by this plan.

The scope of these new licenses will be limited by two criteria: vessel size as reflected by gross tonnage; and the distance vessels operate from shore.

H. Enforcement.

The Coast Guard will use existing statutory and regulatory criteria as standards of eligibility for commercial fishermen to receive a license. These criteria include:

- minimum age
- U.S. citizenship
- basic English language skills
- medical fitness
- experience
- character and habits of life
- professional qualifications

Statutory requirements for drug and alcohol screening, suspension and revocation proceedings, and 5 year renewal apply to these new licenses.

I. Actions to implement the plan.

1. The Coast Guard will seek legislative authority to require persons who operate uninspected commercial fishing industry vessels of less than 200 gross tons to be licensed. This could be accomplished by amending current authority in Chapter 89 of 46 U.S. Code. As a model for such an amendment, the Coast Guard suggests:

A documented uninspected commercial fishing vessel, fish processing vessel, or fish tender vessel, of less than 200 gross tons, shall be operated by an individual licensed by the Secretary to operate that type of vessel under prescribed regulations.

2. In cooperation with commercial fishermen and industry representatives, the Coast Guard will conduct a series of Job Task Analyses. These analyses will be used to determine the appropriate minimum professional qualifications required to operate a commercial fishing industry vessel safely and practical means for measuring them.

3. The Coast Guard will publicize the standards in a Federal Register Notice of Proposed Rulemaking and include the procedural requirements for obtaining a license.

4. The Coast Guard will develop and publish course approval guidelines for private training entities to utilize in developing curriculum outlines to submit for approval to the Coast Guard.

5. The Coast Guard will authorize private third-parties to certify the professional abilities of commercial fishermen as partial eligibility to receive a license.

6. Subject to Congressional concurrence with this plan, the Office of Marine Safety, Security and Environmental Protection will prepare budgetary initiatives to obtain the funding and billets needed to manage and control a license program for all operators of federally documented, uninspected commercial fishing industry vessels of less than 200 gross tons.

7. Upon receipt of authorization and appropriation for additional resources, the Office of Marine Safety, Security and Environmental Protection will initiate the new licensing program.