

GENERAL COMMENTS

Organization

1989 NPRM

The basic organization of the proposed revised Subchapter T remains the same as the existing regulations. The part numbers and topics remain the same except for Parts 178 and 179. Parts 178 and 179 are reserved in the existing Subchapter T. Under the proposed regulations, Part 178 contains regulations on intact stability and seaworthiness. Part 179 discusses subdivision, damage stability, and watertight integrity. These parts had originally been dedicated to stability and subdivision prior to November 4, 1983.

Except for Part 180 (Lifesaving), the general order and topic of subparts, sections, and paragraphs in the proposed subchapter is basically unchanged from the existing subchapter. However, the outdated numbering system of the existing regulations is revised to correspond to the revised CFR numbering system. Each section number includes the number of the part followed by a period and a sequential number.

1994 SNPRM

Although most comments supported the Coast Guard's efforts to consolidate regulations and policies and reduce inconsistencies, numerous comments were received about the apparent complexity of the proposed regulations. The NPRM incorporated the basic provisions of the International Maritime Organization's (IMO) "Code of Safety for Dynamically Supported Craft," the requirements of Coast Guard Navigation and Inspection Circular (NVIC) 11-83, "Regulations for Very Large 46 CFR subchapter T Passenger Vessels," and other NVICs, the contents of numerous policy letters, and the provisions of the Coast Guard Marine Safety Manual (MSM). The MSM provides guidance to the Coast Guard Officer in Charge, Marine Inspection (OCMI) on the enforcement and interpretation of inspection regulations. Consolidation of these many standards and policies into the regulatory requirements gives the impression that regulations are being increased when, in fact, many of the "new" regulations have long existed as policy. This method also made the NPRM "complex" and hard to use.

In addition, many comments were concerned with the inclusion of regulations for specific vessels not previously addressed in subchapter T, such as Dynamically Supported Craft and vessels with overnight accommodations for more than 49 passengers. Some comments expressed a fear of such regulations "trickling down," i.e., intentionally or unintentionally being applied to smaller, less complex vessels, without a need for such requirements.

The Coast Guard understands the concerns of industry on the complexity of the regulations. Consequently, this SNPRM proposes organizing the small passenger vessel regulations in a significantly different manner. In order to separate requirements for larger vessels from those for smaller vessels, a new subchapter K is being proposed for vessels which, because of their greater size, passenger capacity, and resulting complexity, are beyond the traditional description of a small passenger vessel. In this SNPRM, subchapter T contains the regulations for vessels carrying not more than 150 passengers including vessels with overnight accommodations for not more than 49 passengers. Subchapter K contains the regulations for small passenger vessels carrying more than 150

passengers or with overnight accommodations for more than 49 passengers. These two breakpoints were chosen for the applicability of subchapter K since more stringent structural fire protection requirements are proposed for any vessels exceeding the two points.

The numbering system and organizational structure of the new subchapter K is designed to parallel the numbering system and structure of subchapter T. This will expedite familiarization with the new subchapter and provide for easy reference between subchapters although they are designed to be used independently of each other without any need for cross-referencing. In subchapter K all requirements for vessels carrying more than 150 passengers or with overnight accommodations for more than 49 passengers, even if identical to those in subchapter T, will be repeated to prevent the need for cross-referencing. In subchapter T, references to other subchapters were minimized.

The creation of a new subchapter should make the regulations easier to read and understand, and eliminate any fears of an unintentional “trickle down effect.”

Except for parts 178 and 179, the general order of parts, subparts, sections, and paragraphs in the proposed subchapters T and K is basically unchanged from the existing subchapter T. However, the outdated numbering system of the existing regulations would be revised to correspond to the revised CFR numbering system.

In a few cases, a section previously included in subchapter T, as proposed in the NPRM, is proposed by this SNPRM to be included only in subchapter K. Typically this would include sections which are only applicable to vessels carrying more than 150 passengers or with overnight accommodations for more than 49 passengers.

A comparison of the organization of the two proposed subchapters for use as an index is provided in the following table.

Organization of Proposed Subchapters T and K

Subject matter	Subchapter K part no.	Subchapter T part no.
General provisions.....	114	175
Inspection and certification.....	115	176
Construction and arrangement.....	116	177
Intact stability and seaworthiness.....	N/A	178
Subdivision, damage stability, and watertight integrity.....	N/A	179
Lifesaving equipment and arrangements.....	117	180
Fire protection equipment.....	118	181
Machinery installation.....	119	182
Electrical installation.....	120	183
Control and miscellaneous systems.....	121	184
Operations.....	122	185

Consolidation of Regulations

1989 NPRM

The Coast Guard is presently making an effort to consolidate vessel inspection requirements by subject matter into functional subchapters of 46 CFR. Each major topic would be addressed in a single subchapter applicable to almost all vessels. Existing functional subchapters include Subchapter F (Marine Engineering), Subchapter J (Electrical Engineering), and Subchapter S (Subdivision and Stability). The functional subchapters allow streamlining of regulations and elimination of redundant material. Other functional subchapters planned include 46 CFR Subchapters K (Fire Protection) and W (Lifesaving).

The Coast Guard is making an exception to the development of functional subchapters for Subchapter T. The Coast Guard is proposing that almost all the regulations applicable to small passenger vessels be contained within Subchapter T, as they were previously. Subchapter T is an exception for several reasons. The size of the small passenger vessel fleet, its ownership and management system, and the workload it generates for the Coast Guard necessitate the availability of a convenient and ready reference for use by both the public and Coast Guard personnel. Small passenger vessels are usually owned by small entities which are often without the financial capabilities or expertise to research and evaluate numerous functional subchapters. Additionally, the standards in the proposed regulations are designed to meet the specific needs of small passenger vessels. If small passenger vessels had to comply with functional subchapters, detailed regulations would have to be included in them on lifesaving equipment, fire protection, electrical equipment, etc., for small passenger vessels resulting in the functional subchapters being needlessly complicated for small passenger vessel owners and operators.

Consequently, the Coast Guard is proposing to move the stability and subdivision regulations affecting most small passenger vessels from Subchapter S to Subchapter T. The proposed changes to Subchapter S are included as a part of this rulemaking.

Additionally, under docket CGD 85-080A, the Coast Guard is proposing that the manning regulations affecting small passenger vessels be moved from 46 CFR Part 15 to Part 186 of Subchapter T, where they were located prior to October, 1987.

Notwithstanding the above, the Coast Guard still intends to require certain small passenger vessels to comply with portions of functional subchapters including stability, machinery, and electrical, as well as with certain Subchapter H regulations applicable to passenger vessels. Many small passenger vessels are under 100 gross tons only because of extensive tonnage reductions and exemptions. Inclusion of appropriate regulations to sufficiently cover such vessels in Subchapter T would require excessive space and would duplicate detailed, acceptable regulations contained in the functional subchapters. Additionally, these vessels will generally be the larger ones whose owners, managing operators, and builders have the expertise to use and comply with applicable portions of the functional subchapters. This proposal will include authority for the Commandant to determine when compliance with such additional regulations is required.

Authority Changes

1989 NPRM

Public Law 98-89 of August 26, 1983, codified numerous laws relating to vessels and seamen and enacted Subtitle II of Title 46, U.S. Code, into positive law. Its purpose was to revise and consolidate then existing laws without making substantive changes. This necessitates the updating of the regulations throughout Title 46 of the Code of Federal Regulations, including Subchapter T, which contain authority citations and references to the laws which were repealed by Pub. L. 98-89.

Consequently, this proposal reflects the current authority citations and statutory references for the regulations proposed including citation to 46 U.S.C. 3306 as the primary authority to regulate small passenger vessels.

Applicability

1989 NPRM

Proposed § 175.110 details the general applicability of Subchapter T. While the proposed rules apply to both new and existing small passenger vessels, an existing vessel may, with some exceptions, comply with the new regulations or the applicable construction, arrangement, and equipment regulations in effect prior to the effective date of the proposed regulations. Proposed § 175.400 defines a new vessel and an existing vessel.

A section in each part of the proposed regulations, except Parts 175 and 176 describes how that part applies to existing vessels. Where necessary, the basis of the application for certain new requirements to existing vessels is explained in the discussion of the proposed rules for each part in this preamble.

Breakpoints

1989 NPRM

The hazards and risks created by the operation of a small passenger vessel varies greatly depending on length, total passenger capacity, existence of overnight accommodations, number of decks, service route, machinery, etc. Consequently, the Coast Guard has developed a graduated system of regulations with increasingly more stringent requirements for a vessel or operation which presents increasingly greater safety hazards or risks. Breakpoints were developed to determine when a vessel is subject to particular regulations. Most breakpoints were originally mandated by Congress, established to comply with the intent of law, or result from an international convention. Examples of breakpoints presently existing in Subchapter T include 26 feet, 65 feet, 49 passengers, and 150 passengers.

Because of familiarity, most of the existing breakpoints were retained in the proposed regulations. Any new requirements included in the proposed regulations were generally added within the framework of the existing breakpoints. This was done to limit the number of additional breakpoints and to minimize the complexity of the regulations. New breakpoints included in the proposed regulations include: "more than 400 passengers" and "with overnight accommodations." Although not used in existing Subchapter T, these, breakpoints are used in other existing regulations and Coast Guard policy. The application of the new breakpoints is explained in this preamble in the discussion of the regulations where the new breakpoints are used.

1994 SNPRM

As with existing subchapter T, the NPRM proposed a graduated system of regulations with generally increasingly stringent requirements as a vessel exceeds certain thresholds or breakpoints. The proposed breakpoints varied, using factors such as total passenger capacity, length, existence of overnight accommodations, number of decks, service, route, and machinery.

The Coast Guard received numerous comments concerning the use of breakpoints throughout subchapter T. The Coast Guard response to comments on breakpoints for specific requirements in the NPRM is discussed throughout this preamble. For example, changes in the criteria used to determine the need for certain survival craft are discussed under part 180 in this preamble.

The NTSB endorsed the use of a graduated system of regulations based on criteria other than tonnage. The Coast Guard agrees with the NTSB and others that the number of passengers carried should be the primary factor in determining safety requirements. However, the Coast Guard has retained the use of a variety of factors to establish the applicability of requirements. For example, the physical size of the vessel is important in determining the standards to be used for hull construction as well as the volume of fire fighting water needed. The practicality of installing subdivision bulkheads is partly dependent on the length of a vessel. The need for survival craft may be influenced by the route of a vessel, i.e., the distance it travels from shore based search and rescue resources.

Several comments stated they had expected more than one major breakpoint based on passenger capacity. The comments expressed a desire for an upper breakpoint such as 600 passengers so that requirements which should only be applicable to very large vessels are not also made applicable to vessels carrying between 151 and 600 passengers. The comments claim that the absence of a passenger capacity breakpoint above the existing 150 passenger point would result in overly stringent requirements for smaller vessels.

The Coast Guard concurs with the need for a new, less complex breakpoint scheme. Breakpoints are needed to limit the ever increasing size, and passenger carrying capacity of vessels which, through the use of various devices in the basic tonnage formulae, are considered small passenger vessels. Under the proposal, the split between subchapter T and K serves as a major breakpoint. Subchapter K contains the following new upper breakpoints for vessels which must comply with subchapter H (Passenger Vessels):

- a. Vessels which carry more than 600 passengers;
- b. Vessels with overnight accommodations for more than 150 passengers; or
- c. Vessels of more than 200 feet in length.

Vessels exceeding any one of these breakpoints because of their capacity or length would still be considered small passenger vessels because of their gross tonnage, but would have to comply with the requirements for construction and outfitting for a passenger vessel (of at least 100 gross tons) presently contained in subchapters H, F (Marine Engineering), J (Electrical Engineering), and S (Subdivision and Stability). The inspection and operational requirements of parts 114, 115, 121, and 122 of proposed subchapter K (corresponding to parts 175, 176, 184, and 185 of subchapter T) would still be applicable to the small passenger vessels which would be regulated by requirements of

these other subchapters. Specifically, newly constructed passenger vessels exceeding these breakpoints would be inspected under the requirements for certification that appear in subpart H of part 115. Existing vessels would be grandfathered, as allowed by § 114.110(c)(2).

With the establishment of these breakpoints, application of certain requirements primarily intended for vessels carrying as many as 3,000 passengers could be reduced. This would minimize the so called “trickle down effect” whereby smaller capacity vessels are required to comply with requirements intended for larger capacity vessels. These new proposed breakpoints are also in keeping with the Coast Guard's desire to minimize the complexity of the regulations by minimizing the number of breakpoints and aligning them with the type of vessels which the industry has become accustomed to building and operating as small the following paragraphs.

Six hundred passengers would be the upper passenger capacity breakpoint for subchapter K. Six hundred passengers is presently used in subchapter S for subdivision purposes. Additionally, industry comments also suggested 600 passengers as the breakpoint for the establishment of regulations for “large type subchapter T vessels.” Presently, relatively few vessels less than 100 gross tons (approximately 25) carry more than 600 passengers.

One hundred fifty passengers would be the overnight accommodation capacity upper breakpoint which would trigger compliance with subchapter H. This is consistent with existing § 177.10-5 which requires vessels carrying more than 150 passengers to comply with structural fire protection requirements of subpart 72.05 of subchapter H which the OCMI determines to be applicable. The Coast Guard considers the provisions of NVIC 11-83 as adequate for vessels with overnight accommodations for between 50 and 150 passengers and proposes to incorporate them into subchapter K. The additional expense of full compliance with the applicable requirements of subchapters F, J, H, and S is not warranted. Presently, there are no small passenger vessels with overnight accommodations for more than 150 passengers. In fact, 138 is the largest number of overnight accommodations on a small passenger vessel of which the Coast Guard is aware.

The 200 foot maximum length breakpoint would help limit the size of small passenger vessels. Although passenger capacity is the primary criterion for evaluating risk, length is another criterion to consider. Vessels under 200 feet may use the American Bureau of Shipping (ABS) Rules for Building and Classing Steel Vessels Under 61 Meters (200 feet) and ABS Rules for Building and Classing Reinforced Plastic Vessels. Lacking a maximum length criterion, it is possible to build a vessel significantly more than 200 feet in length that is less than 100 gross tons and certificated for just under the maximum passenger capacity breakpoint. At least 2 vessels with registered lengths of more than 200 feet and several vessels with overall lengths of more than 200 feet are below 100 gross tons.

The breakpoints between subchapters T, K, and H, as proposed in this SNPRM are outlined in the table below.

Breakpoints for Application of Subchapters T, K, and H to Small
Passenger Vessels

Subchapter T	Subchapter K	Subchapter K ¹
≤ 150 passengers or Overnight accommodations for ≤ 49 passengers and ≤ 200 feet	51-600 passengers or Overnight accommodations for 50-150 passengers and ≤ 200 feet	≥ 601 passengers or Overnight accommodations for ≥ 151 passengers or > 200 feet

¹Vessels in this category would still be small passenger vessels (passenger vessels less than 100 GT), but would be required to comply with parts 72, 75, and 76 of subchapter H, parts 114, 115, 121, and 122 of subchapter K, and the applicable requirements of subchapters F and J.

1997 Final Rule

Eleven comments recommended that the breakpoint between subchapter K and K' be raised from 600 to 1,000 passengers to be in line with two compartment subdivision. Two comments noted that over the course of the rulemaking process, several vessels have been built which would fall into the K' category (600+ passengers). Though not required to be built to the extensive subchapter H standards (passenger vessels of 100 gross tons or more) called for in K', these vessels have operated safely for years, and it was recommended that the breakpoint for these vessels be increased to 1,000 passengers.

The Coast Guard partially agrees. Two-compartment subdivision begins at 600 passengers. Of the 450 subchapter K vessels identified in the IFR, only 35 carried over 600 passengers. Some of these vessels were built as far back as 1944. The operating record of these vessels is satisfactory. However, the Coast Guard is concerned with the trend of building larger vessels by manipulating the exemptions to the tonnage rules. The Coast Guard has determined that additional requirements for vessels carrying overnight or large numbers of passengers are appropriate. However, the Coast Guard agrees that adherence to all of the requirements in subchapters H, F, and J is not warranted on small passenger vessels.

NVIC 11-83, "Regulations for very large 46 CFR Subchapter T vessels," identified additional safety requirements for vessels carrying more than 49 overnight passengers that could be applied by the OCMI based on the increased size of the vessel. These additional requirements were taken from subchapters F, H, J and S. In July, 1995, Change 1 to the NVIC added vessels carrying more than 600 passengers to the NVIC's applicability. Many of the recommendations contained in the NVIC were incorporated into subchapter K under the SNPRM and IFR. The Coast Guard stated that subchapter K was to be the middle ground between traditional small passenger vessels under subchapter T and large passenger vessels under subchapter H.

In order to determine a course of action, the Coast Guard compared the recommendations of NVIC 11-83, including Change 1, to the regulations contained in the IFR for subchapter K and K' vessels. In addition, vessels identified in the Marine Safety Information System (MSIS) as carrying more than 600 passengers and admeasuring less

than 100 gross tons had their systems and equipment compared to the NVIC. Based upon these reviews, the Coast Guard decided to eliminate the K' thresholds and place, in subchapter K, additional requirements on vessels carrying more than 600 passengers to focus on the safety concerns of larger vessels. The elimination of 200 feet and 150 overnight passenger thresholds from subchapter K was based on the data collected by the Coast Guard. Only 3 of the vessels identified were over 200 feet in length. This equates to less than a tenth of one percent of the total small passenger vessel fleet of over 5,500 vessels. Clearly, it is not the industry standard to build vessels over 200 feet that admeasure less than 100 gross tons. As for the elimination of the 150 overnight passenger threshold, the Coast Guard has determined that the additional requirements, formerly applied in accordance with NVIC 11-83 to vessels carrying more than 49 overnight passengers and now included in this rule, are appropriate for small passenger vessels carrying more than 150 overnight passengers. The Coast Guard has identified only one vessel, the QUEEN OF THE WEST, that is a subchapter K vessel carrying more than 150 overnight passengers.

Specific changes to the subchapter K regulations include the requirements for an independently-driven fire pump, two electrical generating sets, exit lights, floodlights for lifeboat and liferaft embarkation stations, and emergency lighting for vessels carrying more than 600 passengers. These requirements already exist in the IFR for vessels carrying more than 49 overnight passengers. In addition, stairtower landing area requirements for vessels carrying more than 600 passengers have been placed in § 116.438, and fire hydrant requirements have been placed in § 118.310. The fire hydrant valve requirement was believed to be omitted from the IFR and is considered good marine practice.

Both the stairtower and fire main requirements were contained in NVIC 11-83. Therefore, the Coast Guard has determined that the changes in the final rule should have no impact on vessels carrying more than 49 overnight passengers because this type of vessel has been designed and built to the NVIC for over 13 years.

The Coast Guard has determined that by specifically addressing the additional requirements in subchapter K, rather than referring to part 72 in subchapter H for structural fire protection or to applicable parts of subchapters F and J for machinery and electrical requirements, a consistent minimum level of safety is achieved. It also eliminates confusion in interpreting the word "applicable." In addition, the Coast Guard has determined that although this is a relatively significant change to the regulations, the overall impact to the subchapter K vessel fleet is a reduction in regulations for constructing vessels carrying more than 600 passengers.

Dynamically Supported Craft / High Speed Craft

1989 NPRM

The proposed rules contain specific requirements for the design construction, equipment and operation of dynamically supported craft (DSC) which vary from those for conventional vessels. The proposed DSC regulations are primarily based on the International Maritime Organization's "Code of Safety for Dynamically Supported Craft" (IMO Code) adapted by IMO Resolution A.373(x) on November 14, 1977. The standards of other nations and classification societies and standards developed by the

Coast Guard were considered during the drafting of these proposed changes to Subchapter T. The proposal would require the same design and operational standards for U.S. dynamically supported craft as is currently required for DSC of other countries. The sources of many of the proposed DSC regulations are listed in the Reference column of the Derivative Table in this preamble.

The Coast Guard participated in the development of the IMO Code, supports its philosophy, and has urged builders and designers of DSC to adapt portions of the IMO Code to show equivalent levels of safety to conventional vessel regulations. The IMO Code was intended to be self-contained so that compliance with it would ensure that DSC would have the same level of safety as a vessel which complies with the International Convention for the Safety of Life at Sea. Additionally, the IMO Code urges governments to develop their own specific requirements regulating DSC based on the IMO Code itself.

While many of the requirements in the IMO Code are specific to DSC others are general in nature and, in fact, are applicable to all small passenger vessels. Accordingly, many of the general requirements from the IMO Code are incorporated in these proposed regulations for application to all small passenger vessels. The methods, designs, or arrangements required by such general requirements are already common practice for most vessels. Hence, the cost of imposing them on all vessels is expected to be minimal. An example of a general requirement in the IMO Code which the Coast Guard proposes to be applied to all small passenger vessels is the requirement that exit doors be capable of being operated from inside and outside the place served (IMO Code 4.3.3).

Recognizing the unique design and operational characteristics of DSC, the proposed regulations specifically applicable to DSC are a compilation of safety tradeoffs designed to provide equivalent level of safety to that of conventional displacement vessels. For example requirements for structural fire protection are reduced while more attention is given to passenger evacuation time and primary lifesaving equipment.

Below is a general discussion of the reasons for and effects of primary regulations applicable to DSC:

1. *Vessels included as dynamically supported craft.* The definitions of DSC in proposed § 175.400(c) are adopted from the definitions used in the Code. As proposed, a vessel is considered a DSC if it can be supported by other than hydrostatic forces as a conventional displacement hull vessel is supported and if its maximum speed divided by the square root of the vessel's length times acceleration due to gravity is greater than or equal to 0.9 (that is where $v/\sqrt{gL} \geq 0.9$). The Coast Guard may also consider using other means of defining a DSC which may better reflect the physical feature of a DSC such as a speed displacement coefficient as follows: $F_n V = v/\sqrt{gV^{1/3}}$. Air cushion vessels, hydrofoil vessels, and sidewall vessels are DSC. Some high speed catamarans and high speed monohull vessels may also meet the definition of DSC and, due to their size, speed and dynamically supported operations, are subject to safety hazards comparable to the hazards to which air cushion vessels, hydrofoils, and side wall vessels are subject.

2. *Number of passengers.* The IMO Code is applicable to DSC carrying more than 12 but less than 450 passengers. The 12 passenger breakpoint was used in drafting the IMO Code to coincide with the definition of a passenger vessel in the Safety of Life at Sea Convention (SOLAS). However, specific DSC provisions of this proposal would apply to all DSC carrying more than 6 passengers. Under this proposal a DSC may carry not

more than 400 passengers. The 400 passenger limit in contrast to the 450 passenger limit recommended by the IMO Code is used to minimize breakpoints. Four hundred is presently used as a breakpoint for subdivision requirements

3. *Fire protection.* Under this proposal, a DSC carrying not more than 150 passengers must comply with more fire protection requirements than a similar capacity conventional vessel. Included are requirements for structural fire protection bulkheads around machinery spaces and operating stations, reduced fire loads, prohibition of gasoline engines, and the protection of fuel injection pipes from hot oil. These requirements are designed to decrease the risk of fire on a DSC in recognition of the inability to operate a fixed firemain system when in the dynamically supported mode of operation

The structural fire protection requirements for a DSC carrying more than 150 passengers would be less stringent than the requirements for a similar capacity conventional vessel. If a DSC were to comply with all the structural fire protection requirements for a conventional small passenger vessel carrying more than 150 passengers, the weight of the vessel would make operations in the dynamically supported mode infeasible. A DSC must therefore comply with other requirements, indicated below, to maintain a level of safety equivalent to that on a conventional small passenger vessel.

4. *Operations manual.* The proposal would require an operations manual on each DSC that explains and lists the operational restrictions of the DSC and the procedures by which these restrictions are to be complied with.

5. *Limited operating radius.* The proposal restricts the operation of a DSC to within 100 miles of shore, which is the limit also imposed by the IMO Code. Other factors will also limit the route and time of operations of a DSC. Environmental conditions limit the route of a DSC more than the route of a conventional vessel. For example, exceeding certain wind velocity, sea state, or speed yaw limits may result in unacceptable control characteristics, motions, vibration, structural loads or structural fatigue. Maintenance services and emergency assistance must also be available in the operating area of a DSC.

6. *Failure mode and effects analysis.* Prior to initial certification of a DSC, an analysis would be required for each type of machinery and its associated control system. This analysis is necessary due to the high speed rotating machinery on DSC and the damage and injury which may occur on DSC if machinery fails while the vessel is in a dynamically supported mode. The analysis is intended to be performance oriented allowing the many unique machinery installations possible on a DSC to be suitably addressed. Presently, an analysis is normally generated by DSC designers. Therefore, this proposal is not expected to add additional costs to the purchase price of a DSC.

7. *Requirements for navigation and communications equipment.* The operating speed of DSC makes the proposed additional equipment for navigation, including radar and fathometers, necessary. An individual on watch on a DSC has less time to react to visual and audible input than on most other vessels and has greater need for electronic aids. As recommended by the IMO Code, most DSC would have to maintain a continuous radio watch in order to receive weather reports and emergency notices, and to maintain contact with other vessels while navigating in a congested area.

8. *Specific requirements for operating compartments.* Because of the speed of DSC and the importance of maintaining a proper attitude with respect to the surface of the

water, the crew members on watch in the operating station of a DSC must not be distracted from their duties or be susceptible to injury under normal or emergency conditions. For these reasons, DSC designers must position the controls, instruments, seating, and communications equipment in the operating station to allow the crew members to properly discharge their responsibilities without undue difficulty.

9. *Requirements for means of escape.* This proposal contains specific requirements for means of escape and a minimum evacuation time on DSC. Some of the proposed requirements for exits are new to the regulations but follow commonly accepted practice. Because structural fire protection requirements on DSC are directly tied to passenger evacuation time, evacuation time must be determined in the design stage to permit evaluation of the structural fire protection boundaries during plan review.

10. *Requirements for passenger seating.* The proposed requirements include seats for all passengers, seatbelts, and adjustable chairs that must lock in position. These are necessary because of possible rough rides while traveling at high speeds in heavy weather and transitioning between the dynamically supported mode and the displacement mode.

11. *Bilge system.* A DSC may not be required to fully comply with the bilge pump and piping requirements contained in Subpart E of proposed Part 182 if the vessel has a high degree of subdivision and compartmentation.

12. *Stability.* This proposal requires that a DSC meet the stability standards applicable to other small passenger vessels, based on the vessel's route, length, number of passengers being carried, and number of decks, when operating in the displacement mode.

Compliance with such standards for intact stability, damage stability, and subdivision is necessary for safety when the DSC is in the displacement mode of operation.

DSC must also have satisfactory stability when operating in the dynamically supported mode. Although a number of standards for DSC designs exist, there is no comprehensive standards suitable for all DSC designs. The British Government has standards for air cushion vehicles, the International Maritime Organization has standards for hydrofoil vessels, and the U.S. Navy has a design standard which is well suited for surface effect ships. Due to the diversity of designs and operating principles of DSC, and the limited experiences with DSC, it is necessary to evaluate their stability in the dynamically supported mode on an individual basis. This proposal allows the owner of a DSC to propose acceptable stability standards for operations in the dynamically supported mode based on acceptable standards of other organizations or service trials and individual calculations for the vessel.

Although an increase in the number of DSC is expected, there are not enough DSC operating as small passenger vessels in the United States today to reliably determine the cost the proposed regulations will have on owners. Comments are therefore specifically requested on the cost of the proposals involving DSC from persons that operate or build DSC or contemplate doing so.

1994 SNPRM

Because of the uniqueness of Dynamically Supported Craft (DSC), the rules proposed in the NPRM contained specific requirements, which vary from those for conventional vessels, for DSC design, construction, equipment, and operation. The DSC regulations

and definitions in the NPRM are primarily based on the IMO “Code of Safety for Dynamically Supported Craft” (DSC Code). Recognizing the unique design and operational characteristics of DSC, the DSC Code was developed by IMO to provide a level of safety for DSC on international voyages which is equivalent to that provided by the International Convention for the Safety of Life at Sea, 1974, as amended by the Articles of the Protocol of 1978 and the Amendments of 1981 and 1983 (SOLAS) and the loadline requirements.

The preamble to the DSC Code states that it was developed to allow the design and operation of DSC which take a number of forms. DSC designs include air cushion vessels, hydrofoil vessels, sidewall vessels, and other types of craft essentially within the spectrum existing between ships and aircraft. Many existing regulations were not practicable or sufficient for design or safety reasons. Due to their high speeds, maneuverability, normal dynamic support, aircraft like operations, necessary light weight, and unique machinery, DSC needed alternative requirements. Other vessels, such as certain catamarans, may also have characteristics different enough from conventional displacement vessels, such that, in order for the vessels to safely and properly operate, alternative measures must be used. These characteristics include high speed, the need for a light weight structure, and a planing mode of operation. In order to establish a level of safety equivalent to displacement vessels, the DSC Code contains special provisions in many areas, such as: Advanced methods of design and analysis; weather conditions which might restrict operations; areas of operation; radio communications; evacuation of passengers; rescue services; and vessel maintenance. To prevent piecemeal application of the DSC Code, which might result in a system imbalance that is hazardous to passengers, the DSC Code states that full compliance with all applicable provisions is required if the DSC Code is to be used as an equivalency to the international conventions.

Numerous comments were submitted on both the definition of DSC and the specific requirements proposed for DSC. Three comments stated their support for the proposed rules because the rules would specifically certify DSC, recognize the DSC Code, and clarify what DSC designers must do to meet Coast Guard requirements. However, most other comments did not support the proposed rules regarding DSC, as discussed below. The Coast Guard has reviewed the comments and the intent of the DSC Code, and has consequently made significant revisions to the proposed regulations affecting DSC.

Many comments had various objections to the definition of DSC in the NPRM. Because the provisions of the DSC Code would be incorporated by reference, as discussed below, the Coast Guard's position is that it is important to include the definition of DSC, as specifically contained in the DSC Code, and has done so in § 175.400 (K-§ 114.400) of this SNPRM. The only difference between the definition of a DSC in the IMO Code and the definition proposed in the NPRM was that the definition in the IMO Code (which is the definition proposed in this SNPRM) states that a vessel is a DSC if the vessel is balanced in one mode of operation by other than hydrostatic forces or the vessel meets the speed-length formula. The definition in the NPRM (which no longer applies) was written so that a vessel had to be both dynamically supported and meet the speed-length formula. The definition of DSC is now listed alphabetically with the other terms in § 175.400(b) (K-§ 114.400(b)) of this SNPRM. Under this definition, air cushion vessels, hydrofoil vessels, and sidewall vessels (surface effect ships) would be

included as DSC, as would many high speed catamarans and high speed monohull vessels which meet the specified speed-length formula and are supported, at least partially, in one mode of operation by other than hydrostatic forces.

Several comments stated the DSC rules should only be applicable to air cushion vessels, hydrofoils, and sidewall vessels, believing that the speed-length formula in the definition unjustifiably results in many high speed excursion yachts, party fishing boats, and catamarans having to meet the requirements for DSC. One comment stated the opposite, indicating that monohull vessels should be considered DSC if they are capable of DSC performance. One comment stated that the DSC definition should be revised to reflect the actual intent of the DSC Code which is to serve as an optional alternative to SOLAS.

The Coast Guard supports the philosophy of the DSC Code and is proposing in this SNPRM that compliance with the DSC requirements should be mandatory for vessels with the design and operations typical of air cushion vessels, hydrofoil vessels, and surface effect ships (i.e., those vessels which have all or a significant part of their weight supported by other than hydrostatic forces). However, the owner of a vessel which meets the speed-length criteria in the DSC definition in this SNPRM should have the option of using the provisions of the DSC Code. The DSC Code could be used to establish an equivalent level of safety if compliance with the regulations for conventional vessels is impossible or may harmfully affect the weight, speed, and other desirable operational characteristics of the vessel. In this SNPRM, vessels with high speed planing hulls or vessels such as fast catamarans, which meet the definition of a DSC, would not be required to comply with the DSC Code but could propose to use the provisions of the Code as equivalent to subchapter T or K requirements under new § 175.540(b) (K-§ 114.540(b)). The Coast Guard's position is that, in general, the provisions of the DSC Code are not suitable for vessels which are not of the light weight construction and do not operate at the high speed typical of DSC. The DSC Code will not be considered equivalent to SOLAS or U.S. Regulations for vessels which do not meet the definition of a DSC.

In this SNPRM, the Coast Guard is proposing to incorporate by reference the provisions of the DSC Code by listing it in § 175.600 (K-§ 114.600).

Owners of any vessel which meets the DSC definition in this SNPRM and which is to be certificated for international voyages will be required to comply with all provisions of the DSC Code, or alternatively, all provisions of SOLAS. This is in keeping with the intent of the DSC Code. Owners of any DSC which has all or a significant part of its weight supported by other than hydrostatic forces (i.e., an air-cushion vehicle, hydrofoil, or surface effects ship) will most likely not be able to meet the requirements of SOLAS, and will have to comply with the DSC Code.

Owners of any vessel which meets the DSC definition in this SNPRM and which will not be certificated for international voyages, would be required to comply either with the DSC Code or subchapter T (or K, as applicable), at the option of the owner. For vessels which meet the DSC definition in this SNPRM, which will not be certificated for international voyages, and which the owners choose to design in compliance with subchapters T or K instead of the DSC Code, the OCMI may require operational controls or additional safety equipment. Under newly proposed §§ 176.110, 177.700(a), 177.800(f), and 184.100(b) (K-§§ 115.110, 116.700(a), 116.800(f), and 121.100(b)),

operational controls or additional safety equipment, such as seat belts or radar, which are specified in the DSC Code but which are not specifically required on all small passenger vessels by proposed subchapters T or K, may be required by the OCMI on a case-by-case basis. These proposed sections are included in the specific section discussions later on in this preamble. Because proposed subchapters T and K do not address many operational characteristics of DSC which have all or a significant part of their weight supported by other than hydrostatic forces (i.e., an air-cushion vehicle, hydrofoil, or surface effects ship), compliance with some portions of the DSC Code may be required (i.e., stability and operation in the dynamically supported mode). Owners of these types of vessels also will most likely not be able to meet the requirements of subchapter K, and will have to comply with the DSC Code.

The Coast Guard is revising proposed § 175.540(b) (K-§ 114.540(b)) to state that the Commandant may accept the provisions of the DSC Code as equivalent to the applicable requirements of subchapter T or K. Requests to use the DSC Code as an equivalent would be handled on a case by case basis by the Marine Technical and Hazardous Materials Division at Coast Guard Headquarters, and will be carefully evaluated to ensure that system safety, as envisioned in the DSC Code, is maintained. Where the DSC Code does not have provisions equivalent to specific requirements proposed in subchapters T or K, or where the Code leaves determinations up to the administration, such as the specific wiring requirements in § 183.340 (K-§ 120.340), a vessel would be expected to comply with the applicable requirements in subchapters T or K.

U.S. regulations require all vessels carrying greater than 150 passengers to be of steel or equivalent metal construction, i.e., noncombustible. However, the DSC Code allows the use of other than noncombustible materials provided the administration is satisfied that additional precautions are taken to ensure that an equivalent level of safety is achieved. Longstanding Coast Guard policy is that it is difficult, if not impossible, to make structural vessel components (such as hulls, bulkheads, and decks) of combustible materials (such as fiber reinforced plastic (FRP)) equivalent to metal construction. Therefore, DSC constructed of combustible materials have not been allowed by the Coast Guard to operate in the U.S. carrying greater than 150 passengers.

Because of these changes the Coast Guard has deleted § 176.116 and the specific construction, outfitting, and operational requirements for DSC proposed throughout the NPRM. With the removal of specific DSC requirements, it is not necessary to define the other terms associated with DSC as proposed in the NPRM. Therefore, § 175.400(c) has been removed.

1996 IFR (High Speed Craft)

The definition of Dynamically Supported Craft (DSC) used in the SNPRM was based primarily on the International Maritime Organization (IMO) "Code of Safety for Dynamically Supported Craft" (DSC Code). Recognizing the unique design and operational characteristics of DSC, the DSC Code was developed by IMO to provide a level of safety for DSC on international voyages equivalent to that provided by load line requirements and the International Convention for Safety of Life at Sea, 1974, as amended by the articles of Protocol of 1978 and the amendments of 1981, and 1983 (SOLAS). Recently, the DSC Code was revised to address the growth in both size and type of advanced marine craft that has occurred since adoption of the DSC Code in 1977.

The revised code is titled "International Code of Safety for High Speed Craft" (HSC Code). New criteria based on speed and volumetric Froude number are used to delineate those craft to which the code applies from other more conventional craft. This IFR incorporates defining criteria for High Speed Craft (HSC) that are consistent with the new IMO HSC Code.

The HSC Code was developed to address the design and operation of a wide range of advanced marine vehicle types. HSC designs include air cushion vessels, hydrofoil vessels, side wall vessels, and other types of craft essentially within the spectrum existing between ships and aircraft. Many existing regulations were not practicable or sufficient for design or safety reasons. Due to their high speeds, maneuverability, normal dynamic support, airplane like operations, necessary light weight, and unique machinery, HSC may need alternative requirements. Other vessels, such as certain catamarans, may also have operating characteristics different enough from conventional displacement vessels to necessitate alternative measures to ensure safe and proper operation. These characteristics include high speed, the need for lightweight structure, and a planing mode of operation.

In order to establish a level of safety equivalent to displacement vessels, the HSC Code contains specific provisions in many areas including advanced methods of design and analysis; weather conditions that might restrict operations; areas of operation; radio communications; evacuation of passengers; rescue services; and vessel maintenance. To prevent piecemeal application of the HSC Code, which might result in a system imbalance that is hazardous to passengers, the HSC Code states that full compliance with all applicable provisions of the code is required if the HSC Code is to be used as an equivalency to the international conventions.

The Coast Guard position is that, in general, the provisions of the HSC Code are only suitable for vessels that are of lightweight construction with a need to operate at the high speeds typical of an HSC. Vessels that meet the definition of an HSC are not required to comply with the HSC Code; however, this Code may be proposed as an equivalent standard for vessel design, construction, and operational requirements under new §§ 114.540(b) and 175.540(b). The HSC Code is not considered equivalent to SOLAS or the U.S. regulations for vessels which do not meet the definition of an HSC. The Coast Guard is no longer proposing to incorporate the provisions of the HSC Code by reference by listing it in §§ 114.600 and 175.600.

One comment noted that the regulations should specifically indicate in which sections the HSC Code would be an acceptable equivalent. The comment also noted that the HSC Code should only be applied in its entirety to avoid creating potential "imbalances." The Coast Guard agrees. This IFR provides, in those areas where the HSC Code does not contain specific provisions or items are left to the satisfaction of the Administration, the requirements of subchapters T and K apply. It also provides that the HSC Code can only be used in its entirety as an equivalency since it is based on a "systems engineering" approach to design. In general terms, the use of the HSC Code as an equivalency will supplant the sections of the CFR that it addresses. The HSC Code is intended to be an option for equivalency to the requirements of subchapter T and K, and a vessel designer may determine if it is advantageous to apply the Code in place of the corresponding subchapter T and K sections.

Another comment pointed out that the required speed of the craft should meet the IMO HSC Code criteria rather than the speed/length formula from the DSC Code. The Coast Guard agrees that the definitions of HSC used in these regulations should be consistent with the international criteria. The use of the term DSC is discontinued and the term HSC is adopted to maintain consistency with the IMO HSC Code.

One comment expressed concern that the proposed definition of DSC included an overly large population of moderate speed planing vessels as a result of the speed formula in the SNPRM. The Coast Guard notes that these craft have been approved in the past using these rules and have had an acceptable safety record. The comment went on to state that proposed § 182.130 (a), excluded the use of American Boat and Yacht Council (ABYC) rules for DSC's. The Coast Guard disagrees. Section 182.130 (a) applies to propulsion and machinery. The ABYC rules are referenced in the regulatory text, and have been satisfactorily applied to DSC in the past.

Vessels meeting the HSC definition in the IFR that will be certified for international voyages must comply with the provisions of the HSC Code, or otherwise, all applicable provisions of SOLAS. This is in keeping with the intent of the HSC Code. Vessels meeting the HSC definition in this IFR that will not be certified for international voyages, would be required to comply with the applicable U.S. regulations, but may request substitution of the HSC Code for applicable U.S. regulations. Vessels that meet the HSC definition in this IFR, which will not be certificated for international voyages, and which the owners choose to design in compliance with the applicable U.S. regulations in lieu of the HSC Code, may be subject to additional requirements determined by the cognizant Officer in Charge, Marine Inspection (OCMI). The cognizant OCMI may require operational controls, or additional safety equipment under new §§ 115.110, 116.700 (a), 116.800 (f), 121.100(b), 176.110, 177.700(a), 177.800(f), and 184.100(b). For example, seat belts, which are specified in the HSC Code but are not specifically required on all small passenger vessels by subchapters T or K, may be required by the cognizant OCMI on a case-by-case basis. The above sections are further discussed in the comments for each specific section.

The Coast Guard is retaining proposed §§ 114.540(b) and 175.540(b) to state that the Commandant may accept the provisions of the HSC Code as an equivalent to the applicable requirements in subchapter T or K. Requests to use the HSC Code as an equivalent to the regulations will be handled on a case-by-case basis by the Marine Safety Center, and will be carefully evaluated to ensure that system safety, as envisioned in the HSC Code is maintained. Where the HSC Code does not contain provisions equivalent to the specific requirements proposed in subchapters T and K, or where the Code leaves determinations up to the Administration, such as the specific wiring requirements in §§ 120.340 and 183.340, a vessel would be expected to comply with the requirements in the applicable U.S. regulations.

The SNPRM proposed restrictions on routes for DSC. The proposed sections, §§ 115.110(b) and 176.110(b), have been removed. The OCMI may restrict routes for vessels built and operated under the HSC Code, and may impose additional requirements if necessary to ensure safety.

1997 Final Rule (High Speed Craft)

See specific comments to the definition of High Speed Craft in Parts 114 and 175.

Specific Provisions for Large Vessels

1989 NPRM

Three provisions in the present regulations give the OCMI and Commandant authority to impose regulations in excess of Subchapter T when appropriate. In the past few years, an increasing number of vessels have been built to which application of additional requirements under these provisions has been appropriate.

1. Existing § 175.05-1(b) authorizes the OCMI to require any vessel carrying more than 150 passengers to comply with requirements in Subchapter H (Passenger Vessels), Subchapter P (Manning), Subchapter F (Marine Engineering), and Subchapter J (Electrical) of this chapter, which the OCMI considers appropriate. The manning requirements, previously in Subchapter P, were recently revised and moved to Subchapter B.

2. Existing § 175.05-15 provides that the Commandant shall prescribe regulations, in addition to those in Subchapter T, if the Commandant determines that the gross tonnage of a vessel has been reduced below 100 gross tons by the extensive use of exemptions, reductions, or other devices in the tonnage formulation. If it were not for the extensive use of reductions and exemptions, such a vessel would have had to comply with Subchapter H which generally contains more stringent standards than Subchapter T.

3. Existing § 177.10-5 states that vessels which carry more than 150 passengers shall meet the structural fire protection requirements of Subchapter H (Passenger Vessels). However, the OCMI is given the discretion as to how to apply those structural fire protection requirements.

The OCMI is allowed discretion under §§ 175.05-1(b) and 177.10-5 because the OCMI is the most familiar with the local route of a vessel and associated hazards. However, many vessels today operate in more than one inspection zone. The discretion authorized to account for local differences now often results in significant inconsistencies among vessels operating in the same area. The inconsistencies occur because the vessels were certificated in different inspection zones where the OCMI's imposed different regulations. The Coast Guard has received numerous comments from small passenger vessel owners and managing operators complaining about such inconsistencies. To counter such inconsistencies, the Coast Guard has promulgated policy guidance to Coast Guard field units and the small passenger vessel industry on the application of §§ 175.05-1(b), 175.05-15, and 177.10-5. Policy guidance has been issued in the form of policy letters, the Coast Guard Marine Safety Manual, and Navigation and Vessel Inspection Circular (NVIC) 11-83, "Regulations for Very Large 46 CFR Subchapter T Vessels". The Coast Guard is proposing to incorporate much of this guidance into regulation thereby making the provisions of the guidance mandatory and reducing the discretion of the local OCMI. This will help reduce the serious problems with inconsistencies among inspection zones.

By incorporating this policy guidance into regulation, the Coast Guard would reduce but not eliminate the discretion of both the OCMI and Commandant in regulating small passenger vessels. Reducing the discretion is necessary to limit inconsistencies, but some discretion is still necessary to address unique situations.

NVIC 11-83

1989 NPRM

As stated in NVIC 11-83, the Coast Guard has found that designers of most small passenger vessels of more than 79 feet in length and of less than 100 gross tons used one or more of the special provisions or interpretations of the basic gross tonnage formulation so that such vessels measure less than 100 gross tons. In certain circumstances, the safety hazards to which such a "very large" small passenger vessel is subject may be offset by restrictions on the use of the vessel. Examples of when this may be true are when the vessel operates on restricted routes or when the vessel does not carry passengers in overnight accommodations. However, the Coast Guard has found that in most instances where a "very large" small passenger vessel has overnight accommodations for more than 50 passengers, increased safety hazards exist necessitating imposition of requirements in addition to those in Subchapter T, as authorized by existing § 175.05-15.

The Coast Guard published in NVIC 11-83 a list of regulations the Commandant often makes applicable to vessels of less than 100 gross tons, of more than 79 feet in length, and which have accommodations for more than 50 overnight passengers. The additional regulations are contained in Subchapter F (Marine Engineering), Subchapter H (Passenger Vessels), Subchapter J (Electrical Engineering), and Subchapter S (Subdivision and Stability) of Tide 46 of the Code of Federal Regulations.

As part of the project to revise Subchapter T, the Coast Guard reviewed NVIC 11-83 and found that after four years of use, the guidelines in the circular are useful and most of the listed regulations applicable. Consequently, the Coast Guard has incorporated the contents of NVIC 11-83 into the proposed rules as indicated below.

Most of the regulations listed in NVIC 11-83 are proposed in this notice to be applicable to vessels of more than 65 feet in length which have overnight accommodations for more than 49 passengers. The length criteria has been reduced from 79 feet used in NVIC 11-83 to 65 feet to minimize the number of breakpoints in the regulations. Sixty-five feet will remain the primary breakpoint routinely used to classify separate regulations for large and small vessels inspected under Subchapter T. It was a breakpoint initially established by law and upon which the existing T-S and T-L vessel determinations are made. The overnight accommodations criterion is reduced from more than 50 passengers to more than 49 passenger also to minimize the number of breakpoints. The existing Subchapter T uses more than 49 passengers in several places including for stability purposes and for prescribing the number of fire and bilge pumps. More than 50 passengers is not presently used as a breakpoint in regulation.

Some of the structural fire protection equipment regulations of Subchapter H listed in NVIC 11-83 have been found to inadequately address the needs of the affected small passenger vessels often resulting in excessive requirements. Consequently, new structural fire protection equipment regulations are proposed in Subchapter T which would adequately cover these "very large" small passenger vessels with overnight accommodations for more than 49 passengers.

Alternative Standards for Small Vessels

1989 NPRM

The proposed regulations authorize specific alternative standards for vessels of not more than 65 feet, in length and carrying not more than 12 passengers. Under the proposal such vessels may comply with certain standards and recommended practices published by the American Boat and Yacht Council (ABYC) and certain recreational boating safety regulations contained in 33 CFR Subchapter S, instead of fully complying with all standards in Subchapter T. Compliance with the cited ABYC and recreational boating safety regulations is not required by the proposed regulations but allowed as an alternative to other requirements. This proposal would facilitate the conversions of stock boats, primarily designed for recreational boating and charterboat service, to small passenger vessel service. The specific sections of the proposed rules discussing this alternative are §§ 182.130. and 183.130.

This proposal is based on a recommendation by the National Marine Manufacturers Association (NMMA) submitted to the Coast Guard under CGD 85-021. The NMMA is a trade association serving the recreational boating industry with approximately 380 boat manufacturers and 790 equipment and material manufacturers and vendors as members. The NMMA is concerned that under existing Subchapter T, a vessel which carries only a limited number of passengers, i.e. not more than 12 passengers, must meet the same requirements as a vessel which may carry up to 49 passengers. Many of the vessels built by NMMA members manufacturers are used as crewed charterboats and for demise charters. These vessels may have accommodations for up to 12 passengers. The NMMA believes that many of the regulations in Subchapter T should not be applicable to vessels of the size and type of service of those built by their members. These vessels often certified by the association as complying with strict standards including ABYC standards and 33 CFR Subchapter S (Recreation Vessels) regulations, do not comply with many of the regulations in Subchapter T. However, the NMMA believes because of their own strict standards, which in some areas are in excess of Subchapter T, and because of proven safe operation of the vessels built by their members, that those vessels are also safe to operate as small passenger vessels.

The NMMA proposed that Subchapter T be revised to contain a separate part with specific regulations for chartered vessels, used as bareboat or with crew, carrying not more than 12 passengers. Other parts of the subchapter would be dedicated to other vessel types. The recommended charter vessel regulations contained much of the present Subchapter T regulations and also incorporated certain ABYC standards and recreational vessel regulations.

The Coast Guard agrees that there are sufficient differences in some aspects of design, arrangement and outfitting between a vessel carrying not more than 12 passengers and one carrying not more than 49 passengers to consider alternative requirements for vessels carrying not more than 12 passengers. However, the Coast Guard disagrees that special consideration should be given to charter vessels alone. The structural fire protection, outfitting of lifesaving and fire protection equipment, machinery and electrical arrangements, etc., on a small passenger vessel should not be based on the method by which a passenger arranges to use the vessel. Rather, such requirements must be based on the size of the vessel and its route. Additionally, the dedication of individual parts of Subchapter T to each type, or even a combination of types, of small passenger vessels would result in inefficient duplication.

Twelve passengers provides a satisfactory breakpoint for the establishment of alternative requirements for smaller vessels for a few reasons. As pointed out by the NMMA, vessels designed and used for charter service are usually equipped with accommodations for more than six passengers and usually up to no more than twelve passengers. Additionally, a small passenger vessel on an international voyage carrying more than twelve passengers is subject to the provisions of the International Convention for the Safety of Life at Sea (SOLAS).

The Coast Guard is also proposing that, in addition to the 12 passenger limitation, compliance with the alternative standards be allowed only for those vessels of not more than 65 feet in length. As the size of a vessel increases, complexity and number of systems aboard the vessel increases. Vessels of more than 65 feet in length must fully comply with the regulations in Parts 182 and 183 to adequately protect the vessel from the hazards associated with the increased number and complexity of systems found on those vessels.

Specific Vessel Types

1994 SNPRM

Some comments requested specific regulations for other types of vessels, including crew boats, dive boats, party fishing boats, and dinner boats. In fact, the regulations proposed in the NPRM and in this SNPRM do contain some specific regulations for vessels such as ferries, sailing vessels, non-self-propelled vessels, dive boats, and vessels engaged in recreational fishing. Because of the newly proposed split between subchapters T and K, and the removal of the individual requirements for Dynamically Supported Craft, the specific regulations for special types of vessels are now very limited in number. The remaining limited number of individual requirements has been retained within the main functional parts of subchapters T and K.

Submersible Passenger Vessels.

1994 SNPRM

The regulations proposed in the NPRM did not specifically address the special considerations and operations of submersible passenger vessels. One comment suggested adding structural standards for submersibles. The Coast Guard disagrees. Submersible passenger vessels are still considered novel and unique vessels. As such, these vessels require individual attention and case by case review and approval by the Commandant (G-MVI). At this time there are approximately 7 submersibles certificated as small passenger vessels which is a very small fraction of the small passenger vessel fleet. A NVIC entitled "Guidance for Certification of Passenger Carrying Submersibles" is being developed to explain Coast Guard policy concerning the limited number of these unique vessels and their operations.

Uninspected Vessels.

1994 SNPRM

Numerous comments were received expressing the opinion that uninspected vessels, including uninspected passenger vessels (i.e., those vessels carrying 6 or less passengers), vessels operating under bareboat charters, commercial fishing vessels, and recreational vessels, are less safe than small passenger vessels. These comments opposed any further regulation of the small passenger vessel industry and suggested that any new regulations should apply to uninspected vessels. This opinion encompasses many complex and related issues.

Vessels operating under invalid bareboat charters, or demise charters, are subject to subchapter T, but have long been an enforcement problem for the Coast Guard. The Coast Guard has determined that it cannot legally regulate true bareboat chartered vessels under subchapter T. Therefore, these proposed rules do not address bareboat chartered vessels.

The Commercial Fishing Industry Vessel Safety Act of 1988 (PL 100-424) became law on 9 September 1988. The Act required the Coast Guard to publish safety regulations, develop plans for licensing commercial fishing industry vessel operators, and work with the Marine Board of the National Academy of Sciences to conduct a safety study to determine if fishing vessels require an inspection program. A final rule [CGD 88-079] was published in the Federal Register on August 14, 1991 (56 FR 40364). The fishing vessel safety regulations are intended to improve overall safety of commercial fishing industry vessels and are outside the scope of this SNPRM.

The Coast Guard does not agree that recreational boating is an area currently requiring increased regulation. Coast Guard statistics indicate that the number of deaths and injuries resulting from recreational boating incidents are decreasing. There are no plans to promulgate more regulations. Furthermore, recreational boats are beyond the scope of this rulemaking.

Existing Vessels / Grandfathering

1994 SNPRM

Parts 177 to 185 (K Parts 116 to 122) contain sections which specify how the requirements in that part apply to existing vessels. An existing vessel means any vessel other than a new vessel. Section 175.400 in the NPRM defined a new vessel as a vessel for which:

- (1) The initial construction began on or after the date the regulations would take effect;
- (2) An initial Certificate of Inspection was issued six months after the regulations would take effect;
- (3) A major conversion was initiated on or after the date the regulations would take effect;
- (4) A major conversion was completed for which an amended Certificate of Inspection was issued six months after the regulations would take effect;
- (5) Its authorized route was increased by the cognizant OCMI from a route of lesser severity to a route of greater severity; or
- (6) The maximum number of passengers it is permitted to carry was increased to above certain specified capacities.

Generally, the NPRM proposed that all new and existing vessels meet the revised inspection and operating requirements in parts 175, 176, and 185. With some exceptions, only new vessels would have to meet the construction and outfitting requirements proposed in parts 177 through 184. New equipment which is not installed to specifically replace existing equipment would have to comply with the revised regulations. Alterations to existing vessels would have to comply with the revised regulations. Replacement of equipment in kind (i.e., with equipment similar to that presently installed on the vessel) or replacement to meet existing requirements applicable to the vessel before the revised regulations take effect, need not meet the revised requirements, with the exception of wiring. Repairs or replacement in kind would normally have to meet the requirements in effect when the vessel was built. However, the owner could choose to meet any revised requirements.

As specified in § 180.15, existing vessels would have to meet the survival craft and EPIRB requirements in the proposed rules within specified time periods. As specified in § 181.115, existing fiberglass vessels would have to meet the requirements in § 181.400 for fixed fire extinguishing and detecting systems. And as specified in § 184.115, certain existing vessels would have to meet the requirements for public address systems and first aid kits within specified time periods.

Numerous comments were received on the applicability of specific proposed regulations to existing vessels. Those comments are discussed in this preamble under the sections on existing vessels in each applicable part, such as § 177.115 or § 178.115. The Coast Guard's response to general comments on the effects of the regulations proposed in the NPRM on existing vessels are discussed immediately below.

Several comments stated that the sections in each part on applicability to existing vessels need to be clarified. The Coast Guard has revised those sections for clarification wherever possible. Several comments suggested that the wording of the sections on existing vessels do not clearly indicate that an owner has the option of complying with the existing regulations or the revised regulations. The introductory sentences of §§ 177.115, 178.115, 179.115, 180.15, 181.115, 182.115, and 183.115 (and the corresponding sections of subchapter K) have been revised to more clearly indicate that, with only a few exceptions, a vessel would have to meet the existing requirements or, as an alternative, the revised requirements.

Numerous parties stated the requirements proposed in the NPRM would have significant effects on existing vessels, because the vessels could not be sold to new owners who want to upgrade the route of the vessel or increase the passenger capacity without significant costs. Some comments specifically proposed eliminating items (5) and (6) of the “new vessel” definition.

Existing vessels may be redesigned to increase passenger capacity or to operate on routes for which the vessel was not originally designed. The intention of the definition of “new vessel” in the NPRM was to require existing vessels which upgraded their capacity or route to comply with the new, more stringent requirements in the revised regulations. Allowing such an upgrade for an existing vessel, with a corresponding increase in risk, and only requiring compliance with the regulations in effect at the time the vessel was originally certificated would be unfair to owners of new vessels. However, the Coast Guard agrees that the proposed definition of a “new vessel” in the NPRM could unfairly

affect existing vessels which may be certificated for a lower passenger capacity or a less stringent route than actually designed. Without making any major changes, the vessel may be structurally adequate for a more severe route and meet the existing requirements for greater passenger capacity. An owner may have originally requested the lower capacity or less severe route for equipment outfitting purposes or because the particular planned operations of the vessel did not necessitate a larger capacity or more severe route.

The Coast Guard is therefore proposing to change the definition of “new vessel” by deleting paragraphs (5) and (6) of the definition contained in the NPRM which referred to increasing the route and passenger capacity on the vessel’s Certificate of Inspection (COI). However, to ensure that unfair competition with new vessels does not occur, the Coast Guard is also proposing in this SNPRM to revise the definition of “major conversion” to include a conversion of a vessel that substantially alters the design, scantlings, or arrangement so that the vessel is capable of carrying more passengers, or suitable for operation on a route of greater severity, than for which it was originally built.

Some comments stated that existing vessels should always be grandfathered regardless of changes in construction or arrangement. The Coast Guard disagrees that existing vessels should always be grandfathered. Because statistics show the risk of a casualty is generally greater for an older vessel, the requirements proposed in this SNPRM may be even more important for existing vessels. The proposal in this SNPRM which could have the most significant effect on existing vessels is the requirement for inflatable survival craft on certain vessels. Because survival craft serve as the primary piece of lifesaving equipment aboard a vessel, the Coast Guard believes that existing vessels should comply with these proposed rules. The installation of survival craft on existing vessels is further discussed in this preamble under part 180.

The NPRM proposed that an increase in route severity would necessitate compliance with the revised regulations. One comment stated that the revised requirements should not be applied to a vessel if it moves from one harbor to another harbor. Another comment stated that route severity is not defined. Another comment requested that the Coast Guard confirm that a vessel would not have to comply with the revised requirements if the service of the vessel changes but only if the severity of the route or the number of passengers increases.

These comments may have been made because of a lack of understanding of the phrase “route of greater severity”, which is now proposed to be used in the definition of “major conversion.” As used in this proposed definition, the term “route” only refers to a general description of the bodies of water a vessel is permitted to operate on, as endorsed on its COI. Routes include, from greater to lesser severity: Oceans; coastwise; Great Lakes; lakes, bays, and sounds; and rivers. Information on the “routes” a vessel is permitted to operate on and a listing of the order of severity of routes is contained in § 176.110 (K-§ 115.110) of both the NPRM and this SNPRM. A vessel which has its specific area of operation changed from one harbor to another would not normally have to comply with the proposed requirements. Likewise, a vessel which only has its service changed would not normally have to comply with the proposed requirements. Service, as used in regards to the inspection of a small passenger vessel, means the type of operation in which the vessel is employed, i.e., dinner cruises; excursions, including tours, whale watching, or regatta viewing; crew boats; or fishing. Of course, a change of service may

require that a vessel comply with some existing or even new requirement specifically applicable to a vessel in the new service. For example, certain watertight doors on a crew boat would have to be removed or permanently sealed if the vessel changed its service.

As proposed in the NPRM, a vessel whose construction began prior to the effective date of the final rule and which is not issued its initial COI prior to six months after the effective date of the final rule, would be considered to be a new vessel and would have to meet all the revised regulations. One comment, representing the Sea Explorers, indicated that an existing vessel which has not yet been certificated should be grandfathered so that it would only have to meet the presently existing requirements. The Coast Guard disagrees. Generally, allowing such existing vessels to meet only the presently existing requirements would provide an unfair advantage over vessels built after the effective date of the new regulations. The MSM presently contains policy on inspection requirements for Sea Explorer vessels which consider their special operations.

As discussed under part 177 of this preamble, changes have been made to the structural fire protection requirements which apply only to vessels proposed to be regulated by the new subchapter K. The Coast Guard anticipates that many existing vessels may want to make use of the wider range of materials allowed for components such as bulkhead and ceiling linings, and carpets. The increased use of fire retardant materials, in lieu of present requirements for noncombustible materials, was based in part on the increased fire protection and detecting requirements in part 118. Owners of small passenger vessels regulated by subchapter K which upgrade the interior furnishings and finishings of their vessels, using the requirements of part 116, would also be required to ensure their vessels meet the requirements of part 118.

1997 Final Rule (Grandfathering)

Two comments noted that these regulations have not used grandfathering as extensively as in previous regulations despite the absence of specific dangers to public safety.

As discussed in the preambles of the NPRM and SNPRM, the Coast Guard considers the use of grandfathering and phase-in periods in this rule appropriate. The Coast Guard uses grandfathering extensively in this rule. Existing vessels are grandfathered for construction and arrangement, electrical, and machinery requirements unless the vessel undergoes a major conversion or adds new equipment. Additional requirements in firefighting, lifesaving, and vessel operations (crew training) are considered appropriate. The Coast Guard acknowledges that the small passenger vessel industry is safe; however, casualties still occur and life and property are lost as a result. The revised regulations contained in the IFR and final rule will result in an increased level of safety for passengers and crew alike.

Manning

1994 SNPRM

The Coast Guard does not anticipate any revision to the present manning requirements. The regulatory project (CGD 85-080a) to establish new minimum manning requirements for small passenger vessels was withdrawn in January 1990. However, as a result of National Transportation Safety Board (NTSB) recommendation

M-89-111, in NTSB's Safety Study of Passenger Vessels Operating from U.S. Ports (November 28, 1989), the Coast Guard plans to include damage stability, emergency steering, and emergency procedures prior to and after grounding on the examinations for master and mate of a small passenger vessel. Also as a result of NTSB's recommendation, fire fighting systems, equipment and regulations, and electronic navigation have been stressed on these examinations.

Americans With Disabilities Act of 1990

1994 SNPRM

The Coast Guard realizes that regulations which will be published to implement the Americans with Disabilities Act of 1990 (Pub. L. 101-336--July 26, 1990) on ferries and other passenger vessels will impact small passenger vessel design and operation. The Coast Guard will be staying abreast of these requirements and will be providing input to the projects.

1996 IFR

The ADA, enacted on July 26, 1990, has not been fully applied to vessels in the marine transportation environment. Regulations for ferries, excursion boats, and other vessels were reserved and not addressed in the final rule published by the Department of Transportation on September 6, 1991 (56 FR 45530). Comments pointed to the extreme liability that vessel operators may be subject to by not complying with this act because compliance is at times in direct conflict with existing Coast Guard regulations.

Although the Coast Guard agrees with many of the comments received on this issue, specific regulations addressing the ADA are not included in this rulemaking. There are no Department of Transportation regulations or Access Board guidelines specifically covering access to vessels at this time. The Coast Guard understands the industry's concerns in this area. Since the Department of Transportation anticipates a future rulemaking on this issue, the Coast Guard is currently working with the Department to study the feasibility of how to apply the requirements of the ADA to passenger vessels.

Advisory Committee

1994 SNPRM

Several comments suggested the Coast Guard should work more closely with industry to reach workable solutions while developing these regulations and specifically stated that an advisory committee or panel was needed for the small passenger vessel industry. The Coast Guard recognizes that an advisory committee for the small passenger vessel industry, similar to the Towing Safety Advisory Committee or the National Offshore Safety Advisory Committee, would provide valuable information, advice, and recommendations concerning the small passenger vessel industry and the maritime field in general. The Coast Guard has not been provided with funding or a legislative mandate to establish an advisory committee for the small passenger vessel industry, and therefore, does not intend to do so. Instead, the Coast Guard will continue to work together with industry in an attempt to establish cost effective safety requirements. It should be noted

that the Coast Guard has considered all comments in the docket and held six public hearings because of its interest in working with the small passenger vessel industry.

Metric Equivalents

1994 SNPRM

Several comments indicated that metric (SI) units were not consistently used in the NPRM. This SNPRM makes some use of metric equivalents. When the final rule is published, metric units will be used, immediately followed by English units in parenthesis throughout the regulations.

1996 IFR

The IFR has been revised to include metric units using the International System of Units (SI) for all measures with the exception of Nautical Miles (NM) and Knots. English units immediately follow the metric conversions in parenthesis throughout the regulations.

Index

1994 SNPRM

Several other comments pointed out that the NPRM did not have an index, while existing subchapter T and other subchapters do have an index. A useful index will be provided in the final rule.

1997 Final Rule

Two comments recommended that indices for subchapters K and T be added to title 46, Code of Federal Regulations. They appear in the October 1, 1996, edition of title 46.

Drug Testing

1994 SNPRM

Numerous comments were received stating that the Coast Guard estimated costs for the drug testing regulations were much lower than in actuality. Requirements for drug and alcohol testing of crew members were published as a final rule in the Federal Register (53 FR 47064) of November 21, 1988, entitled "Programs for Chemical Drug and Alcohol Testing of Commercial Vessel Personnel." All issues raised by the comments to the subchapter T docket were addressed in that final rule on drug testing and will not be addressed by this SNPRM.

One comment stated that the drug testing regulations should be repeated in subchapter T. The requirements in the drug testing rule were very complex and are

presently centrally located in 46 CFR part 16 for applicability to all vessels. It is unnecessary to repeat them in subchapter T.

Tonnage Measurement

1994 SNPRM

Many comments were received concerning the use, abuse, and elimination of tonnage measurement loopholes which allow the size and capacity of vessels to be increased while remaining under 100 gross tons. Some of these comments specifically mentioned adoption of the International Tonnage Convention (ITC) or revision of the regulations in 46 CFR part 69--Measurement of Vessels. Part 69 was rewritten and the ITC was adopted as the primary tonnage measurement instrument of the United States in a final rule published in the Federal Register (54 FR 37657) on 12 September 1989. Many of the other issues which were raised concerning breakpoints for application of subchapter H are addressed previously in this preamble, under the section on Breakpoints.

Operating Routes

1994 SNPRM

One comment stated that the waters defined by a lakes, bays, and sounds route needed to be clearly defined or eliminated. The Coast Guard disagrees. The route categories which appear on a COI (oceans; coastwise; Great Lakes; lakes, bays, and sounds; or, rivers) describe geographical areas which dictate lifesaving and other outfitting needs. Establishing firm criteria for categorizing ``lakes, bays, and sounds" routes would be unrealistic due to the large number of variables involved. Eliminating the route would place an undue burden on vessels operating on what are generally considered inland waters because current lakes, bays, and sounds routes would be generally reclassified as coastwise.

The comment also stated that the definitions of oceans, coastwise, Great Lakes, lakes, bays, and sounds, and rivers routes were inadequate and confusing, and went on to suggest that the intact stability criteria definitions for protected, partially protected, and exposed waters should be harmonized with routes found on a COI. The terms protected, partially protected, and exposed are used for stability purposes to describe the sea conditions that a vessel might encounter. While these conditions follow general geographical trends, this is not always the case. For example, a sound is generally considered to be partially protected but may be classified as exposed due to local conditions. Geographic terms are occasionally used for stability purposes, and parallel those used for vessel outfitting, with the exception of oceans. For stability purposes, oceans includes coastwise.

Executive Order 12866

1996 IFR

The comments received questioned whether the SNPRM complied with Executive Order 12866, Regulatory Planning and Review. The comments quoted from four areas of the Executive Order, and claimed that the SNPRM:

(1) did not "consider incentives for innovation, consistency, predictability, the cost of enforcement and compliance (to the government, regulated entities, and the public), flexibility distributive impacts, and equity";

(2) was not based on the best reasonably obtainable information concerning the need for, and consequences of the intended regulations;

(3) did not specify performance specifications in lieu of behavior or manner of compliance; and

(4) was not tailored to impose the least burden to society by taking into account the cumulative cost of regulations on the regulated entities.

The Coast Guard generally agrees and as a result:

(1) The IFR includes more alternatives and equivalencies than were proposed in the SNPRM.

(2) The Coast Guard reexamined its casualty statistics, and concluded that the casualty statistics included in the *document A Study of Lifesaving Systems for Small Passenger Vessels* and those referred to in the *Draft Regulatory Evaluation* do not, on their own, appear to show sufficient need for some of the proposed changes. However, the genesis of this rulemaking results from more than casualty statistics. Therefore, the IFR was revised and the regulations eased to more closely reflect the focus of the small passenger vessel casualty history, and reduce the emphasis on the perceived risk of casualties yet to come.

(3) The IFR has also been revised to reduce the prescriptive language intended to regulate behavior, and to incorporate performance based specifications. This is particularly true in the areas of Structural Fire Protection for vessels carrying more than 150 passengers, and in the operations sections in parts 122 and 185.

(4) The Coast Guard did not fully examine the cumulative cost of regulation prior to publication of the SNPRM. The SNPRM had been drafted before Executive Order 12866 was issued. However, the Coast Guard is sensitive to the small passenger vessel industry's concerns about being overregulated, or regulated out of business due to these cumulative costs. As a result, the revisions to the IFR were designed to reduce the cumulative impact of regulations. These revisions are estimated to substantially reduce the cost of this rulemaking when compared to the regulations proposed in the SNPRM, and thereby contribute to reducing the cumulative cost of regulation

Coast Guard Policy

1997 Final Rule

Two comments asked for a list of all documents, such as Navigation and Vessel Inspection Circulars (NVIC's), Policy File Memorandums from G-MCO (formerly G-MVI), Coast Guard Headquarters (HQ) policy letters, and Marine Safety Manual (MSM) sections, that are canceled or revised as a result of this rule. They are:

- NVIC 11-83 with Change 1 "Regulations for Very Large 46 CFR Subchapter T Passenger Vessels" (Canceled).
- G-MVI Policy letter 13-86 "Certificated Small Passenger Vessels Carrying Six or Less Passengers" (Canceled).
- G-MVI Policy letter 22-89 "Watertight Doors in Subdivision Bulkheads on Small Passenger Vessels" (Canceled).

- G-MVI Policy letter 16-93 “Drydock Extensions for Small Passenger Vessels (T-Boats)” (Canceled).
- G-MVI Policy letter 05-95 “Policy on Rail Heights for Passenger Vessels and Small Passenger Vessels” (Revised).
- Policy File Memorandum (PFM) 1-94 on very low fire load options (still in effect and will be incorporated into NVIC 6-80 on structural fire protection).

Subchapter Q

1997 Final Rule

Two comments concerned 46 CFR chapter I, subchapter Q, which contains requirements for the specification and approval of equipment, construction, and materials and which is referenced in subchapters K and T. They recommend that subchapter Q be repealed because the practice of approving equipment is outdated in this age of comprehensive consensus standards, corporate quality control, and the rapidly evolving technology in materials and innovative equipment.

The Coast Guard disagrees that subchapter Q is unnecessary. Where certain items of equipment are required by statute or regulation to be carried on a vessel, the Coast Guard equipment approval system is an invaluable resource for ship operators who would otherwise be uncertain if a particular item would be acceptable. It ensures that requirements are applied uniformly to all vessels and eliminates the need for case-by-case evaluations by an Officer in Charge, Marine Inspection (OCMI). Some specifications in subchapter Q are outdated and in need of revision. However, acceptance standards are still needed to ensure that critical materials and equipment meet minimum national or international safety standards. As resources allow, the Coast Guard intends to revise subchapter Q to maximize the use of performance standards and suitable industry consensus standards. The Coast Guard is very active in encouraging and assisting in the development of industry and international standards.

National Transportation Safety Board

1997 Final Rule

Two comments suggested that the recommendations of the National Transportation Safety Board (NTSB) (M-95-37 through 39) resulting from the ARGO COMMODORE casualty should be implemented before publishing a final rule.

The Coast Guard has provided a response to the NTSB regarding those recommendations. The recommendations were considered in developing these regulations; however, problems surrounding the onboard firefighting efforts in this casualty were more related to personnel and training than to equipment.

Two comments asked why there were 55 outstanding NTSB requirements concerning the safety of small passenger vessels.

The Coast Guard has addressed virtually all of the previously outstanding NTSB recommendations concerning small passenger vessels.

Too Many Regulations

1997 Final Rule

Six comments stated that there were too many new regulations; industry cannot take any more.

The Coast Guard notes that many of the rulemaking projects published in the last year have centered around the adoption of industry standards and the removal of obsolete regulations. These regulations are designed to ease the burden on industry. Other new rulemakings, such as the implementation of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) and the revision of 46 CFR chapter I, subchapter W, (Lifesaving Appliances) are in response to changes in the International Convention for the Safety of Life at Sea, 1974, (SOLAS) and are mandated by international treaty. Where possible, the Coast Guard tries to minimize the impact of SOLAS amendments on the domestic fleet. The small passenger vessel rulemaking has been in development since 1985 and industry has commented on three different versions of proposed and interim regulations. Because of the extensive public participation in this rulemaking at the 17 public meetings and by the submission of written comments, the new small passenger vessel regulations will be a viable, flexible standard for the next 30 years.

Alcohol Consumption

1997 Final Rule

One comment recommended that the operators of passenger vessels be held accountable for the safety of the passengers who consume alcoholic beverages on the vessels.

The master is already responsible for the safety of the passengers and crew on board the vessel. The Coast Guard has determined that additional regulations are not required to clarify this point.

Risk

1997 Final Rule

One comment noted that accident and risk analysis criteria needed to be better developed if used in developing regulations. The comment also noted that the statistics for passenger vessel casualties included foreign flag vessels. The comment stated that 35 percent of casualties occurred on diving boats where the casualty had nothing to do with the vessel's equipment. In addition, a number of casualties were dockside and had nothing to do with the operation of the vessel. It recommended that the Coast Guard rethink how it handles casualties. Just because vessels are getting bigger does not mean that they are not as safe.

The Coast Guard notes that there are several related efforts that have been undertaken to improve risk analysis. They are as follows:

(a) A Risk-Based Technologies (RBT) Management Team has been established to guide risk analysis development. The RBT Management Team is coordinating the risk activities of the Coast Guard Headquarter's Office of Marine Safety with reference to other government agencies and the International Maritime Organization (IMO).

(b) A Marine Board study entitled “Risk Assessment and Management of Marine Systems” is slated to be completed in mid 1997. The goal of this project is to learn to understand and use the different risk assessment methodologies.

(c) A recently published internal instruction titled ”RISK BASED DECISION-MAKING & G-M BUSINESS PLAN GOALS” provides technical and administrative guidance to the field on how risk assessment and management can and should be used in support of Commandant(G-M)’s Business Plan goals.

(d) The Marine Safety Evaluation Program (MSTEP) is based on the use of risk-based technologies and is designed to improve the current process of assessing the safety of marine systems that are within the Coast Guard’s regulatory domain.

In formulating these regulations, the Coast Guard focused on casualties to small passenger vessels. The Coast Guard has commended the industry throughout the rulemaking process on its history of safe-operations and tried to keep new requirements narrowed to the areas of most concern.