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NVIC **5-01**

APR 23 2001

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. **5-01**

Subj: GUIDANCE FOR ENHANCING THE OPERATIONAL SAFETY OF DOMESTIC HIGH-SPEED VESSELS

1. **PURPOSE.** This circular publishes as enclosure (1), the report of the Passenger Vessel Association (PVA) / Coast Guard High Speed Craft working group, which offers guidance regarding the operation of domestic vessels in passenger service, at speeds of 30 knots or more, not meeting the International Code of Safety for High-Speed Craft (HSC Code). Specific guidance, based on industry consensus, is provided in the areas of crew training, vessel operations and navigational safety equipment. Although the report is specific to vessels in passenger service, this circular and the guidance contained herein should also apply to domestic high-speed vessels not engaged in passenger service. It should be noted that this circular does not address external navigational safety issues, such as those relating to waterways management, nor does it address the level of manning for these vessels.

2. **ACTION.**

- a. Officers-in-Charge, Marine Inspection (OCMIs) should review this circular and ensure that the guidance included in enclosure (1) is brought to the attention of the affected vessel owners and operators within their zones. For any vessel meeting the applicability criteria of this circular, OCMIs should discuss with the owner/operator ways to reduce operating risks and to enhance vessel safety. Upon completion of this dialog, the vessel's Certificate of Inspection should be amended, referencing the agreed-upon risk control methods. A sample COI endorsement is given in the enclosed report.
- b. Based on the guidance contained in this circular, high-speed vessel owners/operators should incorporate appropriate safety enhancement measures into their vessel operations and

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company procedures. Recognizing that high-speed vessel operations are often unique to each vessel, company, and area of operation, this guidance should not be considered as limiting or all-inclusive. High-speed vessel owners/operators are also encouraged to continue cooperative efforts by participating in safety forums such as the PVA High Speed Subcommittee, Harbor Safety Committees, and local CG/industry partnership activities. In addition to the specific risk mitigation guidance provided in this circular, the Passenger Vessel Association Risk Guide (which can be downloaded from the Internet at <http://www.uscg.mil/hq/g-m/risk/riskdma.htm>) should be reviewed. This provides owners/operators a risk-based means to examine their operation in greater detail. Finally, the owners and operators of vessels not meeting the specific applicability criteria of this circular, such as those vessels operating at speeds just under 30 knots, are encouraged to apply the enclosed guidance to their own operations.

3. DIRECTIVES AFFECTED. None.


4. BACKGROUND.

- a. Early in 1999, the PVA/CG Partnership Action Team recognized a need to address the potential safety risks associated with the growing fleet of domestic passenger vessels capable of high-speed operations. Despite their safe operating history, vessels operating at higher speeds are subject to elevated risks due to the reduced time the operator has to make navigational decisions when compared to conventional vessels. A fleet-wide observation of these vessels has shown that the majority of owners and operators are applying risk-reducing measures, above and beyond the minimum required by federal regulation, to help ensure the safety of their vessels. The voluntary controls implemented thus far have helped bridge the gap between our domestic regulatory standards and the HSC Code. However, in order to capture the best practices of industry and to address the need for standardized guidance, the PVA/CG Partnership Action Team chartered a working group comprised of existing domestic high-speed vessel operators and associated Coast Guard personnel.
- b. As cited in the purpose section, this circular uses a 30-knot threshold to define high-speed vessel operations. This threshold was established by consensus of the working group as a deliverable of the working group charter. The 30-knot threshold was recognized as a point at which vessel navigation becomes less routine and the risks associated with navigational safety become more apparent. Further discussion on this matter is given in the enclosed report.

5. DISCUSSION.

- a. Our domestic maritime safety laws and regulations are designed to ensure an acceptable level of safety on commercial vessels, which includes an accepted level of risk. Where the regulations do not accommodate vessels of unusual design or operation, the unique design or operating parameters must be addressed and an equivalent level of safety established. With that in mind, domestic high-speed vessel operators should identify the elevated risks associated with their operations and discuss specific ways to mitigate them with the OCMI. The guidance contained in the enclosed report represents a consensus of best industry practices for mitigating risk and enhancing operational safety.
- b. The enclosed guidance is predominantly geared toward modern high-speed vessels engaged in passenger service: particularly those inspected under 46 CFR, Subchapters K or H. These vessels are often equipped with highly sophisticated navigation and engineering equipment/systems. Their safe operation requires a high level of training, expertise and teamwork; the need for a comprehensive training plan and detailed operations manual is absolutely essential. On the contrary, some of the smaller and older vessels to which this NVIC applies may have more conventional navigation and engineering systems. For these vessels, the training plans and operations manuals may not require the same level of detail and some of the additional bridge equipment recommended by the enclosed guidance may be viewed as impractical or unreasonable, particularly for the smaller vessels. Therefore, when applying the enclosed guidance, the vessel operator and OCMI should ensure that the training and operations manuals address the safety concerns associated with the operation of high-speed vessels while also being appropriate for the systems installed on a given vessel; a common-sense approach should prevail.
- c. Federal regulations give the OCMI authority to impose additional safety measures as appropriate for certain vessels. For small passenger vessels inspected under 46 CFR, Subchapters K or T, under Parts 121 and 184 respectively, the OCMI may require additional navigation, control, or communication equipment on vessels operating at high-speeds in restricted or high-traffic areas. Additionally, under 46 CFR 15.501, the OCMI is given broad authority to determine the minimum manning requirements on any inspected vessel. Supplemental to these regulatory provisions, there exists long-standing policy in the Coast Guard Marine Safety Manual, Volume III, Chapter 21, Section S, offering manning and training standards for hydrofoils and air cushion vehicles. Where comparable risks are involved, the OCMI may determine it appropriate to apply the same standards to high-speed passenger vessels as are required for hydrofoils and air cushion vehicles. Recognizing the OCMI's authority to require additional safety measures and the desire to maintain a national consistency, vessel operators are strongly encouraged to comply with the enclosed guidance.

- d. The risk mitigation measures included in this circular are intended to obviate the need for additional regulatory controls. However, considering the basic principles of risk analysis, where various hazards are identified, a probability and consequence rating is assigned, and a relative risk is determined for each hazard, some high-speed vessels may require additional risk control measures, beyond those given by this NVIC. It is generally agreed that high-speed vessels are subject to greater navigational safety risks when compared to vessels operating at slower speeds.
6. APPLICABILITY. This circular applies to domestic, non-HSC Code vessels that are capable of loaded service speeds of 30 knots or more and subject to Coast Guard inspection.



R. C. NORTH
ASSISTANT Commandant for Marine Safety
and Environmental Protection

Encl: (1) Report of the PVA/CG High-Speed Craft Working Group

Report of the PVA/CG High Speed Craft Working Group

Guidance for Enhancing the Operational Safety of
Domestic **H**igh Speed Passenger Vessels

Marine Safety



**Environmental
Protection**



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Appendices

- A** Natural Working Group Charter

Guidance for Enhancing the Operational Safety of Domestic High Speed Passenger Vessels

Executive Summary

Early in 1999, the Passenger Vessel Association/Coast Guard Partnership Action Team, consisting of senior leadership from the two organizations, recognized a need for additional guidance to address the growing fleet of domestic vessels that are capable of high-speed operations. Most domestic high-speed vessels are not required to comply with the HSC Code, but their advanced technologies and operating capabilities place them in an environment requiring additional and sometimes unique training requirements and operational controls. Despite the lack of domestic standards specific to high-speed craft, a fleet-wide observation of these vessels has shown that the owners and operators are, and have been, applying additional risk-reducing measures over the last 10 years to ensure the safety of their vessels. A preliminary summary of these observations was published in enclosure 3 of Navigation and Vessel Inspection Circular 6-99, titled: “Plan Review, Inspection, And Certification Guidance For Vessels Built To The International Code Of Safety For High-Speed Craft And Additional Information Regarding Non-Code High-Speed Vessels.

In order to capture the experience of the existing domestic high-speed vessel industry and address the need for standardized guidance, the PVA/CG Partnership Action Team chartered a nationally represented working group comprised of existing domestic high-speed vessel operators and associated Coast Guard personnel. The working group charter specifically required the development of risk mitigation measures in the areas of training, operations, and bridge equipment. The group convened a series of meetings and developed recommended guidelines for vessel specific crew training and operations manual content as well as recommended carriage requirements for certain bridge equipment.

Recommendations

1. The guidelines described herein should be applied to domestically built, non-HSC Code, passenger vessels, inspected under 46 CFR, Subchapter T, K, or H, capable of loaded service speeds of 30 knots or more.
2. OCMI's should initiate a dialog with owners/operators of vessels meeting the applicability criteria above, to develop appropriate safety enhancement measures based on the information presented by this guidance.
3. High-speed vessel owners/operators should incorporate appropriate safety enhancement measures into their own vessel operations and company procedures based on information presented by this guidance.

4. This informal risk-based review of operations between the OCMI and the vessel owner/operator should result in an amendment to the vessel's Certificate of Inspection referencing the agreed-upon risk control methods.
5. High-speed vessel owners/operators should continue cooperative efforts by participating in forums such as the PVA High Speed Subcommittee, tasked with development of a sample training syllabus and sample operations manual.
6. High-speed vessel owners/operators should also review the PVA Risk Guide (also a product of the PVA/CG partnership), which provides a risk-based means to examine their operation in more detail and enhance safety. The PVA Risk Guide can be downloaded from the Internet at <http://www.uscg.mil/hq/g-m/risk/riskdma.htm>.
7. Owners and operators of domestic passenger vessels not meeting the 30 knot applicability criteria of this guidance, or any other vessel type routinely operating at 30 knots or more are encouraged to consider the enclosed guidance for their own use and initiate a similar dialog with their local OCMI.

Introduction

This report provides guidance regarding the operation of domestic vessels, new or existing, which operate at higher speeds and are not required to meet the International Code of Safety for High-Speed Craft (HSC Code). Recognizing the unique safety issues associated with high-speed vessel operations, the primary focus of this report is on measures to enhance operational safety. Further, this guidance helps to “bridge the gap” between our domestic regulatory standards and the HSC Code. To that end, this report provides guidance in the areas of crew training, vessel operations and navigational safety equipment, intended to be used as a basis for primary risk management dialog between the Officer-in-Charge, Marine Inspection (OCMI) and the domestic high-speed vessel owner/operator. It should be noted that the training guidance provided is intended to assist owner/operators in developing their in-house training programs, and not for the purposes of Coast Guard course approval, type-rating certification, or license endorsements.

This report is the result of a joint effort between the Passenger Vessel Association (PVA) and the Coast Guard. Early in 1999, the PVA/CG Partnership Action Team, consisting of senior leadership from the two organizations, recognized a need for additional guidance to address the growing fleet of domestic vessels that are capable of high-speed operations. Although the HSC Code focuses specifically on high-speed vessels with international routes, the majority of similar vessels in the U.S. are built and operated in accordance with the existing domestic regulatory standards of 46 CFR, Subchapters T and K with domestic routes. Most domestic high-speed vessels are not required to comply with the HSC Code, but their advanced technologies and operating capabilities place them in an environment requiring additional and sometimes unique training requirements and operational controls. These requirements and controls are inherent in the philosophy of and specifically outlined in the HSC Code, but only loosely tied to 46 CFR 121.100(b) and 184.100(b), which empowers the OCMI to require additional navigation, control and communications equipment on vessels operating at high speed in restricted or high traffic areas. Despite the lack of domestic standards specific to high-speed craft, a fleet-wide observation of these vessels has shown that the owners and operators are, and have been, applying additional risk-reducing measures over the last 10 years to ensure the safety of their vessels.

The voluntary controls implemented thus far by this industry segment have been driven by technology instead of regulation and have helped bridge the gap between our domestic regulatory standards and the HSC Code. Currently, these measures are local, company specific interpretations that echo the mandates of the HSC Code. A need developed for a venue to share these existing best practices and include input from the Coast Guard as the primary regulatory body, with an eye toward developing industry-operating guidelines by consensus. In order to capture the experience of the existing domestic high-speed vessel industry and address the need for standardized guidance, the PVA/CG Partnership Action Team chartered a nationally represented working group comprised of existing domestic high-speed vessel operators and associated Coast Guard personnel.

Discussion

In general, the U.S. has been slow to adopt high-speed technology. Fast ferry service has been prevalent in Northern Europe and South East Asia for many years. Therefore, we, as a nation, are able to examine and define our evolutionary development in this technology based on the international experience. To a large degree, other nations have adopted the HSC Code as their domestic standard for fast craft. The U.S. has accepted the HSC Code as an equivalent to our domestic passenger vessel regulations. We have not made wholesale regulatory changes to adopt the HSC Code in total for our entire domestic fleet of fast craft due to the fact that there are existing high-speed operations in the U.S. that have over a decade-long history of safe operation, which predates the HSC Code.

Notwithstanding their safe operating history in the U.S., vessels operating at speeds of 30 knots or more are subject to an elevated risk due to the limited time between the initial perception of danger and the moment of extremis. Our domestic maritime safety laws and regulations are designed to impose a certain level or standard of safety on commercial vessels, which includes an accepted level of risk. Where the regulations are unable to accommodate vessels of unusual design or operation, an equivalent level of safety is required. Domestic high-speed vessel operators must identify the elevated risks associated with their operations, and should discuss specific ways to mitigate them, with the OCMI. The guidance in this report represents a consensus of best industry practice for mitigating risk and enhancing operational safety.

As previously mentioned, this industry is being driven by the technology and is currently doing more than required by current regulations to mitigate their risks. One clear example of this is the predominant practice to maintain two people on the bridge when operating at these higher speeds to account for the increased workload and decreased reaction times. These sorts of practical operating practices are what enhance safety and mitigate risk. However, as the technology continues to improve and vessels become even faster, additional measures or technologies may become necessary again. Therefore, a five-year re-evaluation of this work product is also proposed and necessary to keep current on best practices and lessons learned.

The enclosed guidance is the result of a joint effort between the Passenger Vessel Association and Coast Guard. It represents the work product of a nationally represented working group chartered by the PVA/CG Partnership Action Team to develop industry standards for the operation of non-HSC Code passenger vessels in domestic service.

Charter Summary

The working group charter specifically required the development of risk mitigation measures in the areas of training, operations, and bridge equipment. The group, comprised of a cross-section of experienced domestic high-speed vessel operators and Coast Guard personnel, convened a series of meetings and developed recommended guidelines for vessel specific crew training and operations manual content as well as recommended carriage requirements for certain bridge equipment. This work product was vetted via peer review to a broader group of owners, operators, designers, and builders of domestic

fast craft, including the High Speed Commercial Craft Safety Board (HSCCSB) in New York, the First Coast Guard District's HSC Working Group, as well as the PVA Ferry Council's High-Speed Subcommittee. The working group membership, as well as the work product developed according to the original charter (**Appendix A**), was accepted by the PVA/CG Partnership Action Team in May of 2000.

Work Product

The following presents the work product of the working group based on the required Charter deliverables. In addition to presentation of the final product, an explanation of the group's rationale in arriving at the final product is provided where necessary.

1. Definition of “domestic high-speed craft”

The consensus of the working group was that the “domestic high-speed craft” definition should capture those vessels with loaded service speeds of 30 knots or more. The working group sought a more user-friendly and understandable speed criteria than the more technically driven definition given by the IMO High Speed Craft Code, which would tend to capture many smaller and relatively slower vessels outside the target population.

Considering the mutually agreed focus on safety enhancement and risk management, the working group decided that the target population was better defined by a vessel's loaded service speed. International studies have concluded that the primary risk associated with high-speed vessel operations is the risk of collision. Thus, when considering the best definition for high-speed craft, navigational safety becomes a primary concern. The operators in the working group, based on their experience, agreed that navigating a vessel at speeds under 30 knots is considered routine in most cases, where additional safety measures are not always necessary. However, at speeds of 30 knots or more, navigational safety may quickly become a real concern and additional safety measures become more of a necessity.

The 30-knot speed cut-off should not be viewed as an absolute. Rather, as a part of their broader risk management efforts, owners and operators of all higher-speed vessels, including those that operate at less than 30 knots, should consider these guidelines when examining their operations.

2. Industry recommended guidelines for crew training.

Appropriate training will prepare a crew to safely handle all aspects of vessel operations, both routine and non-routine. In meeting this deliverable, the working group decided that the recommended guidelines for crew training would be best presented by developing a training program outline. The outline below presents the minimum essential requirements for a crew-training program. It is based primarily on the training programs of existing high-speed craft operations and is thus considered a consolidation of current industry practice. While format should be flexible to accommodate company infrastructure and resources, the key points presented by this guidance should be considered for inclusion in a crew-training manual or training syllabus.

- a. Position prerequisites: Each company should establish minimum prerequisite requirements for each individual crew position. This should include the following:

(1) A list of all crewmember positions

(2) The minimum requirements for filling each position

- (a) Physical standards
- (b) Education/experience required
- (c) Required license or certification

(3) Essential duties and responsibilities for each position

- b. Training methodology: Each company should state their training objectives, providing an explanation of qualification criteria and evaluation methodology. This should include how individual and team training, as applicable, are to be conducted. Training objectives should be performance based and specific to the vessel, the vessel's authorized route, and the crewmember's assigned position. The training methodology should respond to the following questions:

(1) Who is qualified to conduct the training?

Explanation: The person(s) qualified to conduct and certify completion of training should be listed for each crew position. This may be most simply completed by using a crew hierarchy approach. For example, the document may state that the Master is qualified to conduct and certify training for Mates and Deckhands (as appropriate). In general, only an individual who has met the appropriate performance and experience criteria should be assigned to conduct and certify completion of training. This person need not be a superior.

(2) Where is the training to be held?

Explanation: Training should be held in a location (environment) appropriate for ensuring that all trainees obtain the required knowledge and skills under realistic conditions. For example, the document may require that navigation training for low visibility conditions be held on the bridge of a

specific high-speed vessel, while underway, with visibility conditions not exceeding a predefined distance.

(3) *What is the objective of each training module or segment?*

Explanation: Each training segment should address the following:

(a) PERFORMANCE: *What must the learner be able to do at the conclusion of the training segment?*

This should explain a specific task to be performed or demonstrated. In order to qualify as a task, the performance must have an observable beginning and ending.

(b) CONDITION: *Under what condition is the training held?*

This should describe the conditions under which the trainee must operate under to satisfy completion of the objective.

(c) STANDARD: *What is the performance standard?*

This should explain how performance is measured. Objective performance criteria should be provided wherever possible. Some examples might include: required number of repetitions with perfect performance; amount of time allowed to complete a performance; tolerance for error in navigational calculations, etc.

Example: Upon completion of this training segment, the learner will be able to tie a class A ferry up to pier 1 [*performance*] under high wind conditions (___ knots) with cross currents [*condition*], without hard impact 9 of 10 times [*standard*].

(4) *What is the method of assessing the learner's final ability?*

Explanation: Learners must demonstrate the required level of knowledge or ability before the training objective is met. The organization's approved training syllabus should state how "testing" must be completed for individual objectives (or for training modules). Normally, a qualified person will carry out tests or assessments by observing completion of the training objective. Sometimes written tests might be appropriate (for plotting, listing resources, drawing schematics, etc.).

(5) *What is the method for documenting completed modules?*

Explanation: The organization must have a way to document each individual's training progress. This should be done at the lowest possible level in the organization to enable identification of discrepancies at the task level. The method of documentation must be able to track each person's proficiency over the period of time between sessions of refresher training. The OCMI and the

vessel owner/operator should agree on what method/format is used for documentation and record keeping.

(6) What is the process for refresher training?

Explanation: The need for refresher training must be considered for every training objective (segment or module). The organization must consider the frequency of task performance and quality of individual performance, measured against the original training objective. Certain tasks may need only occasional refresher training because individuals are continuously performing them during routine vessel operations. Other tasks (or subtasks) may require refresher training on an irregular basis due to irregular periods between performance tasks.

3. Industry recommended content for a Vessel Operations Manual.

A well-written Vessel Operations Manual will aid a vessel operator in developing and implementing the best operating procedures and will promote consistency in vessel safety despite variations between operators, traffic, environmental conditions, and other dynamic influences. This section outlines the minimum essential information to be included in a Vessel Operations Manual. Although this list is rather comprehensive, it is not necessarily all-inclusive and therefore, should not limit the discretion of the operator or OCMI to add or delete information, as the operation and situation warrants.

a. Vessel specific characteristics and critical systems specifications

- (1) Vessel particulars.
- (2) Vessel performance characteristics and operating limitations.
- (3) Passenger embarkation systems.
- (4) Intact and damaged stability characteristics (e.g., loading and weight distribution).
- (5) Navigation (bridge) equipment.
- (6) Primary safety systems (fire, lifesaving, emergency).

b. Routine operating procedures

- (1) Vessel startup/shutdown procedures.
- (2) Loading procedures.
- (3) Docking/mooring.
- (4) Departure and arrival procedures (including safety announcement to passengers).
- (5) Replenishment procedures (fueling, provisioning).
- (6) Communications procedures.
- (7) Administrative procedures (duties including crew change).
- (8) Normal operating procedures.
- (9) Enhanced operating procedures under special conditions. Each item below should address how bridge resources will be managed (i.e. how bridge staffing and equipment will be adjusted to meet changing conditions).
 - (a) Restricted visibility.
 - (b) Heavy traffic.
 - (c) Mechanical failure.
 - (d) Sea-state operating procedures.
 - (e) Wave height -vs- speed considerations.
 - (f) Following sea operating considerations.
 - (g) Restricted passage.

c. Service and maintenance procedures

- (1) Routine maintenance.
- (2) Preventative maintenance.
- (3) Shore support infrastructure.

d. Emergency procedures

- (1) Fire.
- (2) Man overboard.
- (3) Flooding.
- (4) Evacuation / abandon ship.
- (5) Crash stop.
- (6) Medical.
- (7) Emergency communications (crisis communications) –
 - (a) Internal within the company/vessel organization.
 - (b) External to the support infrastructure.
 - (c) Passenger handling/crowd control
- (8) Steering system failures.
- (9) Navigation equipment failures.
- (10) Loss of propulsion

e. Route specific considerations and procedures

- (1) Route details and familiarization procedures.
- (2) Weather (fog, wind, sea conditions, etc.).
- (3) Special navigating areas (speed, wake adjustments).
- (4) Traffic Separation Schemes.
- (5) Regulated navigation areas.
- (6) Anchorages.
- (7) VTS interaction.

4. **Minimum carriage recommendations for bridge navigation and communications equipment.**

Modern equipment, if properly integrated into operational procedures, can enhance the operator's senses, automate certain navigational functions, and effectively increase the time available for operational decision-making. Listed below are minimum carriage recommendations for vessel navigation and communications equipment. Notwithstanding these minimum recommendations, the OCMI may consider additional equipment as allowed by 46 CFR 121.100(b) and 46 CFR 184.100(b).

a. Minimum carriage recommendations:

- (1) Two radars with manufacturer maximum speed installation recommendations.
- (2) Without respect for other carriage requirements, a minimum of two VHF radios.
- (3) Method of communicating with shore base other than primary VHF.
- (4) DGPS navigation system.

Recommended Action

The guidelines in this report are intended to be applied to domestically built, non-HSC Code, passenger vessels, inspected under 46 CFR, Subchapter T, K, or H, capable of loaded service speeds of 30 knots or more.

Officers-in-Charge, Marine Inspection (OCMIs) shall review this report and ensure that the enclosed guidance is brought to the attention of the affected vessel owners and operators within their zones. For vessels meeting the applicability criteria above, OCMIs should initiate a dialog with vessel owners/operators to develop appropriate safety enhancement measures based on the information presented by this guidance. It is intended that this informal risk-based review of operations between the OCMI and the vessel owner/operator will result in an amendment to the vessel's Certificate of Inspection referencing the agreed-upon risk control methods. The following example is given as an appropriate COI endorsement:

Vessel operations and crew training shall be conducted in accordance with the Operations Manual and Training (Plan, Program, Outline) dated [insert date].

High-speed vessel owners/operators should incorporate appropriate safety enhancement measures into their own vessel operations and company procedures based on the guidance contained in this report. This guidance should not be considered as limiting or all-inclusive, recognizing that high-speed vessel operations are unique to a company's infrastructure, the capabilities of each vessel, as well as the nature and limitations of individual operating environments. High-speed vessel owners/operators are also asked to continue cooperative efforts by participating in forums such as the PVA High Speed Subcommittee. In addition to the specific risk mitigation guidance provided in this report, the PVA Risk Guide (also a product of the PVA/CG partnership) should be reviewed. This guide, which is available through the PVA web site, provides owners/operators a risk-based means to examine their operation in more detail and enhance safety. Finally, the owners and operators of domestic passenger vessels not meeting the 30 knot applicability criteria of this guidance are encouraged to consider the enclosed guidance for their own use and initiate a similar dialog with their local OCMI. The same is true for owners and operators of any other vessel type routinely operating at 30 knots or more.

M. C. Cruder
Commander, U.S. Coast Guard
Quality Assurance and
Traveling Inspection Staff San Pedro, CA

G. Bombard
President
Catalina Channel Express

Date

Date

CHARTER

**NATURAL WORKING GROUP (NWG)
TO DEVELOP INDUSTRY STANDARDS FOR THE OPERATION OF NON-HIGH
SPEED CRAFT CODE PASSENGER VESSELS IN DOMESTIC SERVICE**

1. **PURPOSE.** This Charter establishes a NWG and provides the authority, direction and procedures to examine the operational parameters of high speed passenger vessels currently in domestic service, which are not required to be high speed craft code compliant with respect to operational safety measures.

To highlight the unique issues associated with these domestically built vessels, the existing operational experience was published in Enclosure (3) to NVIC 6-99. This operating experience, which shows similarities to the parameters in the IMO HSC Code, will be refined into a set of operational industry standards interpreted for domestically built non-IMO high speed craft. The result will be published as a guide for OCMI's and high speed operators to use in conjunction with established risk management techniques to identify and enhance the continued safe operation of this new breed of vessel type.

2. **BACKGROUND.** The domestic high speed passenger vessel market has been growing steadily over the last ten years in urban areas as an alternative to increasingly over-taxed land based transportation systems. Although there is an international standard for the construction and operation of this vessel type in the IMO High Speed Craft Code, the majority of the U.S. market is built to the domestic regulatory standards of subchapter T or K. Regardless of which standard these vessels are built to, the advanced technology used in these vessels places them in an operating environment requiring additional and sometimes unique training and operational controls. These parameters are inherent in the philosophy of and specifically outlined in the IMO HSC Code, but only loosely tied to 46 CFR 115.700 and 176.700, which empowers the OCMI to require additional navigation, control and communications equipment on vessels operating at high speed in restricted or high traffic areas. This disparity has been recognized by current operators of domestic high speed vessels, who have established in-house specialized training and other controls to account for the unique operational nature of these vessels. These controls are local and company specific interpretations that echo the mandates of the IMO HSC Code.
3. **DELIVERABLES.** The NWG is tasked to produce the following deliverables:
 - a. Definition of domestic "high speed craft."
 - b. Industry recommended guidelines for crew training.
 - c. Industry recommended content for Vessel Operations Manuals.
 - d. Minimum carriage recommendations for bridge navigation and communications equipment.

APPENDIX (A)

The NWG will limit its work to the operational and training aspects associated with high speed vessels as they relate specifically to non-IMO HSC Code vessels in domestic service. If other high speed craft issues surface as a result of this work and must be addressed, further direction from the PAT shall be requested.

4. **SPECIFIC TASKS.** The NWG is given the flexibility to discuss and adapt the tasks specified herein to the problem at hand. In order to produce the required deliverables, it is recommended to take the following approach:
 - a. Review Enclosure (3) to NVIC 6-99 and other resource documents as a guide to determine the issues or aspects of high speed passenger vessel operation that need further control.
 - b. Define high speed craft for the purpose of applying additional safety measures to address unique operational concerns as necessary. Consult with other Flag State Administrations to assist.
 - c. Develop crew training guidelines for domestic non-IMO HSC Code vessels.
 - d. Develop recommended content for an Operations Manual suitable for domestic non-IMO HSC Code vessels.
 - e. Determine minimum carriage requirements for navigation and communications equipment aboard domestic non-IMO HSC Code vessels.
5. **RESOURCES.** The NWG shall consist of the individuals listed below. Other necessary resources will be determined by the members during the course of their activities.

| | | |
|---------------|---|--|
| Team Leaders: | <u>CDR Marc Cruder</u> <u>Mr. Greg Bombard</u> | USCG (G-MO-1) PVA |
| Team Members: | <u>Mr. David Clark</u> <u>Ms Beth Gedney</u> <u>Mr. Gary Dunzelman</u> <u>Mr. Keith Stahnke</u> <u>Mr. Bill Blumensaadt</u> <u>CDR Danny Ellis</u> <u>LCDR Paul Szwed</u> <u>LT Brian Willis</u> | Hornblower Marine Services Clipper Navigation Hydrolines, Inc. Blue & Gold Fleet Jet Express USCG (VTS-San Francisco) USCG (G-MSE-1) USCG (G-MOC-2) |
| Team Support: | PVA Ferry Council High Speed Subcommittee CGHQ HSC Code Working Group LCDR George Burns (G-M-2) LT Dave Dolloff (NMC-4c) Mr. Scott Humphrey (VTS-San Francisco) Peter Lauridsen – PVA Technical Consultant | |

Resource Documents: Refer to the work and recommendations already completed by the High Speed Commercial Craft Safety Board (HSCCSB) and the First CG District High Speed Craft Working Group.

6. **TIME LINE.** The NWG should follow the timeline for deliverables below.
 - a. Finalize Team membership and meet within 60 days
 - b. Provide a project status report to the PAT at the 1999 fall meeting, including a signature ready charter and firm deliverable schedule.
 - c. Provide draft standards detailing the applicability of this effort to non-high-speed-craft-code passenger vessels in domestic service. This work product shall include industry recommended guidelines for crew training and Operations Manual content as well as minimum carriage recommendations for bridge navigation and communications equipment to the January 2000 PAT meeting.
 - d. Submit final standards to the Spring 2000 PAT for action and adoption.

7. **STRUCTURE.**

The NWG must evaluate the time and location of meetings for the group. Meetings may be held as often as necessary to complete the task. However, as good fiscal stewards, it is necessary to ensure meetings are called when conference calls and other means of electronic communication will not suffice. Meetings should be held in locations which will spread the financial and time obligations among the participants.

R. North
Rear Admiral, U.S. Coast Guard
Assistant Commandant, Marine Safety
and Environmental Protection

C. Hendricks
President
Passenger Vessel Association

Date

Date