

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 20-14

- b. The HSC Code is developed to be applied as a complete set of comprehensive requirements. The basic aim of the HSC code is to set levels of safety equivalent to conventional ships. This includes the training and competence of the crew.
- c. The HSC Code requires that the Master and all officers having an operational role on high-speed craft be type rated. Type rating is a periodic process that involves physical examination, operational and/or simulator training, and practical demonstrations leading to an assessment of competence commensurate with the tasks required for a particular class of craft operating upon a specific route.

5. DISCUSSION.

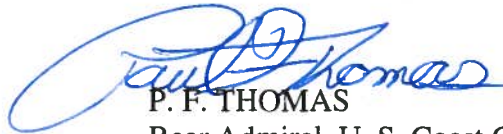
- a. Masters, Mates, and Engineers seeking a HSC type-rating endorsement must hold a valid U. S. Coast Guard officer endorsement authorizing service in the appropriate grade, tonnage, horsepower, and route of the vessel(s) for which the type rating will be valid. Other members of the crew are required to receive training in accordance with section 18.3 of the HSC Code, but are not required to hold HSC type-rating endorsements. Guidance on qualification requirements is provided in Enclosure (1).
 - b. Under 46 CFR 11.821(b)(2), qualification for a HSC type-rating endorsement requires successful completion of a Coast Guard approved training program. Guidance for the development of training programs leading to a HSC type-rating endorsement is provided in Enclosure (2).
 - c. Mariners seeking to renew an HSC type-rating endorsement must demonstrate continued competency as specified in 46 CFR 11.821(e). Additional information concerning continued competency can be found in Enclosure (1).
 - d. Excerpts from the HSC Code have been provided in enclosure (3) for informational purposes only.
6. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a regulation. It is not intended to nor does it impose legally-binding requirements on any party. It represents the Coast Guard's current thinking on this topic and is issued for guidance purposes to outline methods of best practice for compliance to the applicable law. You can use an alternative approach if the approach satisfies the requirements of the applicable statutes and regulations.

7. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.

- a. The development of this NVIC and the general policies contained within it have been thoroughly reviewed by the originating office, and are categorically excluded (CE) under current USCG CE # 33 from further environmental analysis, in accordance with Section 2.B.2. and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1 (series). Because this NVIC implements, without substantive change, the applicable Commandant Instruction or other federal agency regulations, procedures, manuals, and other guidance documents, Coast Guard categorical exclusion #33 is appropriate.

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- b. This NVIC will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change to existing environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment.
8. RECORDS MANAGEMENT CONSIDERATIONS. This NVIC has been thoroughly reviewed during the directives clearance process, and it has been determined there are no further records scheduling requirements, in accordance with Federal Records Act, 44 U.S.C. 3101 et seq., National Archives and Record Administration requirements, and Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This policy does not create a significant or substantial change to existing records management requirements.
9. QUESTIONS. All questions regarding implementation of this Circular should be directed to the Mariner Credentialing Program Policy Division (CG-CVC-4), at (202) 372-2357 or MMCPolicy@uscg.mil. To obtain approval for a High Speed Craft Type-Rating training program, contact the NMC at (888) 427-5662 or IAskNMC@uscg.mil.



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- Encl: (1) Discussion of Qualification Requirements for High-Speed Craft Type-Rating Endorsements
(2) Guidance for the Development of Training Programs Leading to the Issuance of High-Speed Craft Type-Rating Endorsements
(3) Excerpts from the International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code)

DISCUSSION OF QUALIFICATION REQUIREMENTS FOR HIGH-SPEED CRAFT TYPE-RATING ENDORSEMENTS

1. GENERAL.

This enclosure provides guidance to qualify for high-speed craft (HSC) type-rating endorsements.

2. SEA SERVICE, TRAINING, AND DEMONSTRATIONS.

- a. As stated in 46 Code of Federal Regulations (CFR) 11.821, in order to qualify for an HSC type-rating endorsement, the applicant must:
 - 1) Hold a valid officer endorsement for vessels of commensurate grade, tonnage, route, and/or horsepower; and
 - 2) Provide evidence of successful completion of a Coast Guard approved HSC type-rating training program.
- b. A separate type-rating endorsement will be issued for each type and class of high-speed craft. The original route will be as specified in the approved type-rating program. Additional routes may be added to an existing type-rating endorsement by completing at least 12 round trips over each route under the supervision of a type-rated Master for the class and route of high-speed craft for which the HSC endorsement will be valid. Six of the trips must be made during the hours of darkness or a “daylight only” restriction will be imposed.
- c. A type-rating endorsement will be valid for 2 years. The expiration date of an HSC type-rating endorsement will not be changed when additional routes are added (46 CFR 11.821(d)).
- d. Under 46 CFR 11.821(e), to renew an HSC type-rating endorsement, a mariner must either:
 - 1) Provide evidence of:
 - i) at least 6 months of service during the preceding 2 years in the endorsed position on the type of crafts endorsed; and
 - ii) at least 12 round trips during the preceding 2 years on the type of craft the endorsement is for over each route endorsed; and
 - iii) completion of a revalidation assessment; or
 - 2) Complete a Coast Guard approved revalidation training program.

GUIDANCE FOR THE DEVELOPMENT OF TRAINING PROGRAMS LEADING TO THE ISSUANCE OF HIGH-SPEED CRAFT TYPE-RATING ENDORSEMENTS

1. To qualify for Coast Guard approval, a high-speed craft (HSC) type-rating training program should be documented as specified in 46 Code of Federal Regulations (CFR) 10.402 and submitted to the Coast Guard National Maritime Center (NMC) for approval. The program should include the following:
 - a. An appropriate period of operational underway training and classroom instruction followed by assessment and knowledge of skills;
 - b. Completion of appropriate number of round trips over the route applied for on the type of HSC applied for;
 - c. Instruction in the knowledge and practical skills listed in 18.3.3 of the HSC Code; and
 - d. Practical assessment at the conclusion of training.
2. The period of training is dependent upon the complexity of the craft and the nature of the route. Therefore, each will be evaluated on a case-by-case basis. Up to one-third of the underway instruction may be performed on simulators. The performance-based training and assessment shall be performed on board the specific type and class of craft for which the endorsement is sought. At least 24 hours of classroom instruction and 96 hours of practical onboard instruction/training, including 40 hours while underway, should be provided.
3. Training programs should include all skill proficiencies to be evaluated and related assessment criteria. Assessment criteria should include: the performance condition under which the assessment will be conducted, the performance behavior the candidate must demonstrate, and the performance standard that is the step-by-step procedure the candidate must follow.
4. Training programs should include instruction and assessment for revalidation of type-rating endorsements. Revalidation programs should include learning objectives covering modifications to the craft and/or systems, equipment, route, or company operations and underway assessment on board the type craft for which the revalidation is sought.
5. Instructors designated to teach and monitor operational aspects of HSC should be experienced in the operation of the specific craft type, and meet the requirements of a qualified instructor as prescribed in 46 CFR 10.402(b)(2)(iii). Instructors should have an HSC type-rating endorsement and have experience operating high-speed craft. Ideally, the instructor's experience and type-rating endorsement should be upon the specific class of HSC and the routes for which the training is conducted. However, in cases of new classes of HSC, this may not be feasible and instructors may be approved with experience on comparable HSC. Note that this does not relieve the vessel operator of the duty to comply with all applicable laws and regulations, including those for manning of vessels.
6. When performing the final assessment of mariners in the type-rating program, training assessors must meet the requirements in 46 CFR 10.402(b)(2)(iii). In addition, training

providers are encouraged, but not required, to utilize assessors who are not involved in the underway training.

High-Speed Craft Type-Rating training programs should include the following:

HSC Code Citation	Subject	Training	Practical Assessment	Written Assessment
18.3.3.1	Knowledge of all onboard propulsion and control systems, including communication and navigational equipment, steering, electrical, hydraulic and pneumatic systems, and bilge and fire pumping	✓	✓	✓
18.3.3.2	Failure mode of the control, steering, and propulsion systems and proper response to such failures	✓	✓	✓
18.3.3.3	Handling characteristics of the craft and the limiting operational conditions	✓	✓	✓
18.3.3.4	Bridge communication and navigation procedures	✓	✓	✓
18.3.3.5	Intact and damage stability and survivability of the craft in a damaged condition	✓		✓
18.3.3.6	Location and use of the craft's lifesaving appliances, including survival craft equipment	✓		✓
18.3.3.7	Location and use of escapes and the evacuation of passengers	✓		✓
18.3.3.8	Location and use of fire protection and fire-extinguishing appliances and systems	✓		✓
18.3.3.9	Location and use of damage control appliances and systems, including operation of watertight doors and bilge pumps	✓		✓
18.3.3.10	Cargo and vehicle stowage securement systems (when fitted)	✓		✓
18.3.3.11	Methods for control of and communication with passengers in an emergency	✓		✓
18.3.3.12	Location and use of all other items listed in the training manual (18.2.3)	✓		✓
18.6.1	Control and evacuation of passengers	✓		✓

**Excerpts from the International Code of Safety for High-Speed
Craft, 2000 (2000 HSC Code)**

Notice: These excerpts are provided for background information. By themselves, they do not constitute Coast Guard policy.

International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code)

Chapter 18 - Operational requirements

Part A General

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18.2.3 Training manual

The training manual, which may comprise several volumes, shall contain instructions and information, in easily understood terms, illustrated wherever possible, on evacuation, fire and damage control appliances and systems and on the best methods of survival. Any part of such information may be provided in the form of audio-visual aids in lieu of the manual. Where appropriate, the contents of the training manual may be included in the craft operating manual.

The following shall be explained in detail:

- .1 donning lifejackets and immersion suits, as appropriate;
- .2 muster at the assigned stations;
- .3 boarding, launching and clearing the survival craft and rescue boats;
- .4 method of launching from within the survival craft;
- .5 release from launching appliances;
- .6 methods and use of devices for protection in launching areas, where appropriate;
- .7 illumination in launching areas;
- .8 use of all survival equipment;
- .9 use of all detection equipment;
- .10 with the assistance of illustrations, the use of radio life-saving appliances;
- .11 use of drogues;
- .12 use of engine and accessories;
- .13 recovery of survival craft and rescue boats, including stowage and securing;
- .14 hazards of exposure and the need for warm clothing;
- .15 best use of the survival craft facilities in order to survive;
- .16 methods of retrieval, including the use of helicopter rescue gear (slings, baskets, stretchers), breeches-buoy and shore life-saving apparatus and craft's line-throwing apparatus;
- .17 all other functions contained in the muster list and emergency instructions;
- .18 instructions for emergency repair of the life-saving appliances;
- .19 instructions in the use of fire protection and fire-extinguishing appliances and systems;
- .20 guidelines for use of firefighter's outfit in a fire, if fitted;

- .21 use of alarms and communications associated with fire safety;
- .22 methods for surveying damage;
- .23 use of damage control appliances and systems, including operation of watertight doors and bilge pumps; and
- .24 for passenger craft, control of and communication with passengers in an emergency.

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18.3 Training and qualifications

18.3.1 The level of competence and the training considered necessary in respect of the master and each crew member shall be laid down and demonstrated in the light of the following guidelines to the satisfaction of the company in respect of the particular type and model of craft concerned and the service intended. More than one crew member shall be trained to perform all essential operational tasks in both normal and emergency situations.

18.3.2 The Administration shall specify an appropriate period of operational training for the master and each member of the crew and, if necessary, the periods at which appropriate retraining shall be carried out.

18.3.3 The Administration shall issue a type rating certificate to the master and all officers having an operational role following an appropriate period of operational/simulator training and on the conclusion of an examination including practical test commensurate with the operational tasks on board the particular type and model of craft concerned and the route followed. The type rating training shall cover at least the following items:

- .1 knowledge of all on-board propulsion and control systems, including communication and navigational equipment, steering, electrical, hydraulic and pneumatic systems and bilge and fire pumping;
- .2 the failure mode of the control, steering and propulsion systems and proper response to such failures;
- .3 handling characteristics of the craft and the limiting operational conditions;
- .4 bridge communication and navigation procedures;
- .5 intact and damage stability and survivability of the craft in damage condition;
- .6 location and use of the craft' s life-saving appliances, including survival craft equipment;
- .7 location and use of escapes in the craft and the evacuation of passengers;
- .8 location and use of fire protection and fire-extinguishing appliances and systems in the event of fire on board;
- .9 location and use of damage control appliances and systems, including operation of watertight doors and bilge pumps;
- .10 cargo and vehicle stowage and securing systems;
- .11 methods for control of and communication with passengers in an emergency; and
- .12 location and use of all other items listed in the training manual.

18.3.4 The type rating certificate for a particular type and model of craft should only be valid for service on the route to be followed when it is so endorsed by the Administration following the completion of a practical test over that route.

18.3.5 The type rating certificate shall be re-validated every two years and the Administration shall lay down the procedures for re-validation.

18.3.6 All crew members shall receive instructions and training, as specified in 18.3.3.6 to 18.3.3.12.

18.3.7 The Administration shall specify standards of physical fitness and frequency of medical examinations, having regard to the route and craft concerned.

18.3.8 The Administration of the country in which the craft is to operate, if other than the flag State, shall be satisfied with the training, experience and qualifications of the master and each crew member. A valid certificate of competency or a valid license appropriately endorsed, in accordance with the provisions of the International Convention on Standards of Training, Certification and Watchkeeping (STCW), 1978 as amended, held by the master or crew member, shall be acceptable as evidence of satisfactory training and qualification to the Administration of the country in which the craft is to operate.

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Part B Requirements for passenger craft

18.6 Type rating training

18.6.1 The company shall ensure that the type rating training is implemented. For all crew members, the type rating training shall cover the control and evacuation of passengers additionally to 18.3.5.

18.6.2 When a craft carries cargoes, the craft shall comply with the requirements of part C of this chapter in addition to this part.

Part C Requirements for cargo craft

18.8 Type rating training

The company shall ensure that type rating training is implemented as provided in 18.3. For all crew members, the type rating training shall cover knowledge of cargo and vehicles storage area securement systems.