

Commandant United States Coast Guard 2703 Martin Luther King Jr Ave, SE Washington, DC 20593-7509 Staff Symbol: CG-MMC Phone: (202) 372-1492 Fax: (202) 372-1926

16715 Change 1 to CG-MMC Policy Letter No. 02-18 September 20, 2021

From: M. Medina

COMDT (CG-MMC)

To: National Maritime Center

Subj: CHANGE 1 TO GUIDELINES FOR QUALIFICATIONS OF PERSONNEL FOR

ISSUING STCW ENDORSEMENTS FOR BASIC AND ADVANCED POLAR CODE

OPERATIONS

Ref: (a) Guidelines for Qualifications of Personnel for Issuing STCW Endorsements for Basic and Advanced Polar Code Operations, CG-MMC Policy Letter 02-18

1. PURPOSE. This Change Notice publishes CH-1 to CG-MMC Policy Letter 02-18.

- 2. <u>ACTION</u>. The Coast Guard will use this policy as a guide to issue Polar Code Operations endorsements for deck officers engaged on ships subject to the Polar Code.
- 3. <u>DIRECTIVES AFFECTED.</u> With the release of this Change Notice, CG-MMC Policy Letter 02-18 is updated.
- 4. <u>DISCUSSION</u>. This change notice revises CG-Policy Letter 02-18 to:
 - a. Add a discussion of the requirements for renewal of Basic and Advanced Polar Code Operations endorsements. Renewal requirements for these endorsements were not included in the original policy letter. Methods to qualify for renewal of an STCW endorsement in Polar Code Operations will include completion of refresher training, evidence of being a qualified instructor of a Basic or Advanced Polar Code Operations course, as appropriate, at least twice within the past five years, or sea service. The professional requirements to renew a merchant mariner credential (MMC) in 46 CFR 10.227 include the option to present evidence of at least 1 year of sea service during the past 5 years. However, Section A-I/11 paragraph 4.1 of the STCW Code only requires 2 months of seagoing service within the previous 5 years for renewal of Basic and Advanced Polar Code endorsements. To align with the STCW requirements and to ensure the seagoing service requirement for the renewal of a Polar Code Operations endorsement does not exceed the seagoing service requirement to initially qualify for Polar Code Operations endorsement, the seagoing service requirement for renewal will be 2 months of seagoing service in the previous 5 years. Mariners will also need to meet the applicable requirements in 46 CFR 10.227 for the renewal of their MMC.
 - b. Remove transitional provisions that expired on July 1, 2020.
- 5. <u>DISTRIBUTION</u>. No paper distribution will be made of this policy letter. An electronic version will be located at https://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/National-Maritime-Center-NMC/policy regulations/.

6. PROCEDURE. Remove and insert the following pages of CG-MMC Policy Letter 01-21:

<u>Remove</u> <u>Insert</u>

Page 3 Page 3 CH-1

Enclosure (3) Enclosure (3) CH-1
Enclosure (4) Enclosure (4) CH-1

7. <u>DISCLAIMER</u>. This guidance is not a substitute for applicable legal requirements, nor is it, in itself, a regulation. It is not intended to nor does it impose legally-binding requirements on any party. This guidance represents the Coast Guard's current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other Federal and State regulators, in applying statutory and regulatory requirements. Alternative approaches for fulfilling this policy may be acceptable if the approach satisfies the requirements of the applicable statutes and regulations.

8. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.

- a. The development of this guidance and the general policies contained within it have been thoroughly reviewed under Department of Homeland Security Directive 023-01, Rev.1, associated implementing instructions, and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4370f) by the originating office, and are categorically excluded (CE) from further environmental analysis under paragraph #A3 in Appendix A, of Table 1 of DHS Directive Instruction Manual 023-01, Rev. 1. Because this guidance implements, without substantive change, the applicable Commandant Instruction or other federal agency regulations, procedures, manuals, and other guidance documents, Coast Guard categorical exclusion #A3 is appropriate.
- b. This guidance 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. All future specific actions resulting from the general policies in this guidance must be individually evaluated for compliance with the National Environmental Policy Act (NEPA), DHS and Coast Guard NEPA policy, and compliance with all other environmental mandates.
- 9. <u>QUESTIONS</u>. Questions or concerns regarding implementation of this policy letter and change notice or requests for changes should be directed to the Office of Merchant Mariner Credentialing (CG-MMC) at (202) 372-2357 or MMCPolicy@uscg.mil.



Commandant United States Coast Guard

2703 Martin Luther King Jr Ave, SE Washington, DC 20593-7509 Staff Symbol: CG-MMC Phone: (202) 372-1492 Fax: (202) 372-1926

16715 CG-MMC Policy Letter No. 02-18 June 19, 2018

From: M. Medina

COMDT (CG-N

To:

National Maritime Center

Subj:

GUIDELINES FOR QUALIFICATIONS OF PERSONNEL FOR ISSUING STCW ENDORSEMENTS FOR BASIC AND ADVANCED POLAR CODE OPERATIONS

- 1. Purpose. This policy letter provides guidance for qualifications of personnel for the issuance of Merchant Mariner Credential (MMC) endorsements in accordance with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW) for Basic and Advanced Polar Code Operations. These endorsements are required for deck officers on ships operating in areas subject to the International Code for Ships Operating in Polar Waters (Polar Code).
- 2. Action. The Coast Guard will use this policy as a guide to issue Polar Code Operations endorsements for deck officers engaged on ships subject to the Polar Code.
- 3. <u>Directives Affected</u>. CG-OES Policy Letter No. 01-16 "Guidelines for Training of Personnel on Ships Subject to the Polar Code" is cancelled.

4. Background.

- a. For the purpose of these guidelines the term Polar Waters means ocean waters as defined in the Polar Code.
- b. Current shipping trends show an increase in the number of seagoing ships transiting remote polar regions. This affects both the safety of life at sea and protection of the marine environment, and has become a growing global concern. In addition to the daily challenges of normal shipboard operations, ships operating in polar areas are subject to unpredictable and poor weather conditions, degraded navigation tools, increased threats to operating equipment and increased stability concerns.
- c. The 2010 amendments to STCW include non-mandatory guidance on training for deck and engineer officers serving on ships operating in polar waters to address the need for specialized competency on such vessels. The guidance is in Section B-V/g of the STCW Code.

- d. In response to the challenges faced by these ships and the concern for their safe operation, the International Maritime Organization (IMO) adopted the International Code for Ships Operating in Polar Waters, commonly referred to as the Polar Code, which contains both mandatory and non-mandatory provisions. This code addresses safety and environmental requirements for ships and the level of training required for deck officers serving on them. The mandatory training contained in the Polar Code is risk-based depending on the type of ship and the ice conditions in the area of operation. Implemented internationally through the Safety of Life at Sea (SOLAS), Prevention of Pollution from Ships (MARPOL), and STCW conventions, the Polar Code came into force on January 1, 2017.
- e. The STCW Convention and Code is the instrument that provides the international standards for seafarer training. Through the work of the IMO's Sub-committee on Human Element, Training and Watchkeeping, amendments to the STCW Convention and Code were developed to define the training requirements supporting the implementation of the Polar Code. In order to obtain input from U.S. stakeholders and to facilitate the development of the United States' position to the IMO on the training requirements in support of the Polar Code, the Coast Guard solicited input from the Merchant Marine Personnel Advisory Committee (MERPAC). MERPAC developed recommendations on minimum standards of competence and sea service requirements for Polar Code training at the basic and advanced levels. MERPAC's recommendations provided the basis of the United States' position in shaping the relevant amendments to the STCW Convention and which are the basis of this policy.
- f. Enclosure (1) provides the training and manning information contained in Chapter 12 of the Polar Code. Prior to being assigned duties on board a ship operating in an area subject to the Polar Code, except when the vessel will be in ice free waters, all deck officers should hold the appropriate STCW endorsement for polar water operations in accordance with the Polar Code.
- g. The STCW amendments in support of the Polar Code provide minimum standards of competence, sea service and training requirements for certification at the basic and advanced levels. They also contain transitional provisions for mariners with experience operating in polar waters to meet the new requirements. These amendments enter into force on July 1, 2018. After this date deck officers on ships operating in polar waters will be required to have an MMC endorsement in Basic or Advanced Polar Code operations. Enclosure (2) provides the STCW amendments in support of the Polar Code.
- h. To address the gap between the time the Polar Code entered into force (January 2017) and the time the supporting STCW amendments enter into force (July 2018), the Coast Guard provided CG-OES Policy Letter No. 01-16, "Guidelines for Training of Personnel on Ships Subject to the Polar Code" (81 FR 7552, Feb. 12, 2016). The policy was an interim measure to ensure there would be sufficiently trained U.S. mariners by the time the Polar Code entered into force. The Coast Guard did not issue endorsements to mariners who completed training in accordance with that policy.

i. Cognizant of the approaching date that the STCW amendments enter into force the Coast Guard will utilize the information in this policy letter to issue STCW endorsements in Basic and Advanced Polar Code Operations to deck officers. These endorsements are not currently mandated by Coast Guard regulation, however since the United States is a signatory to the STCW Convention, vessel owners and operators should be aware that their vessels are subject to foreign port state control actions including detention if mariners are not compliant with the STCW Convention and Code. The Coast Guard will issue Polar Code Operations endorsements to mariners who have voluntarily fulfilled the STCW requirements and request the endorsement.

5. Discussion.

- a. The amendments to the STCW Convention and Code include sea service, recency, and training requirements, as well as the minimum standards of competence at the basic and advanced levels for deck officers. There are no additional training or endorsement requirements for personnel assigned to the engineering department.
- b. Mariners who can demonstrate that they meet the training and standards of competence requirements of STCW A-V/4, previously published in CG-OES Policy Letter No. 01-16 and provided in Enclosure (2) of this policy letter, will be considered to have met the respective training and competence portions of the requirements for the MMC endorsements in Basic or Advanced Polar Code Operations. Enclosure (3), paragraph (1) discusses the training requirements for Basic Polar Code Operations and Enclosure (4), paragraph (1) discusses the training requirements for Advanced Polar Code Operations.
- c. The National Maritime Center (NMC) will process applications for STCW endorsements for Basic and Advanced Polar Code Operations. Applications for Polar Code endorsements should be submitted in accordance with requirements described in Enclosures (3) and (4). There are no national endorsements issued for Polar Code operations.
- d. The National Maritime Center will evaluate and approve courses in accordance with this guidance. Coast Guard approved courses for Polar Code operations should include both the training and competence requirements for the endorsements. Providers who had courses evaluated by NMC under CG-OES Policy Letter 01-16 and who received a letter attesting to the course content meeting the requirements of the STCW amendments do not need to resubmit

CH-1 3

courses for a new approval. The National Maritime Center will reissue existing course review letters as a course approval in accordance with 46 CFR 10.402.

- 6. <u>Disclaimer.</u> While the guidance contained in this document may assist the industry, public, Coast Guard, and other Federal and State regulators in applying statutory and regulatory requirements the guidance is not a substitute for applicable legal requirements nor is it a regulation itself.
- 7. <u>Changes.</u> This policy letter will be posted on the web at http://homeport.uscg.mil Changes to this policy will be issued as necessary. Suggestions for improvement of this policy should be submitted in writing to Commandant, U.S. Coast Guard Headquarters, Office of Merchant Mariner Credentialing (CG-MMC) at the address listed on the first page.

#

Encl: (1) Excerpts of Chapter 12 of the International Code for Ships Operating in Polar Waters

(2) Amendments to the STCW Convention and Code defining the minimum standards of competence in basic and advanced training for ships operating in Polar Waters.

(3) Qualification and application for STCW endorsements in Basic Polar Code Operations

(4) Qualification and application for STCW endorsements in Advanced Polar Code Operations

Enclosure (1) EXCERPTS OF CHAPTER 12 OF THE INTERNATIONAL CODE FOR SHIPS OPERATING IN POLAR WATERS¹

1 GENERAL

This enclosure includes the risk assessment that determines the level of training required for deck officers on ships subject to the Polar Code. The assessment accounts for the type of ship and the ice conditions in the area of operation. Accordingly, each deck officer onboard a ship operating in polar waters should complete the training appropriate for the position they fill.

2 TRAINING REQUIREMENTS

12.1 Goal

The goal of this chapter is to ensure that ships operating in polar waters are appropriately manned by adequately qualified, trained and experienced personnel.

12.2 Functional requirements

In order to achieve the goal set out in paragraph 12.1 above, companies shall ensure that masters, chief mates and officers in charge of a navigational watch on board ships operating in polar waters shall have completed training to attain the abilities that are appropriate to the capacity to be filled and duties and responsibilities to be taken up, taking into account the provisions of the STCW Convention and the STCW Code, as amended.

12.3 Regulations

12.3.1 In order to meet the functional requirement of paragraph 12.2 above while operating in polar waters, masters, chief mates and officers in charge of a navigational watch shall be qualified in accordance with chapter V of the STCW Convention and the STCW Code, as amended, as follows:

Ice conditions	Tankers	Passenger ships	Other
Ice Free	Not Applicable	Not Applicable	Not Applicable
Open Waters	Basic training for master, chief mate and officers in charge of a navigational watch	Basic training for master, chief mate and officers in charge of a navigational watch	Not Applicable
Other Waters	Advanced training for master and chief mate. Basic training for officers in charge of a navigational watch	Advanced training for master and chief mate. Basic training for officers in charge of a navigational watch	Advanced training for master and chief mate. Basic training for officers in charge of a navigational watch.

¹ A complete copy of the Polar Code is available at http://www.imo.org/en/MediaCentre/HotTopics/polar/Pages/default.aspx.

- **12.3.2** The Administration may allow the use of a person(s) other than the master, chief mate or officers of the navigational watch to satisfy the requirements for training, as required in paragraph 12.3.1, provided that:
 - .1 this person(s) shall be qualified and certified in accordance with regulation II/2 of the STCW Convention and section A-II/2 of the STCW Code, and meets the advance training requirements noted in the above table;
 - .2 while operating in polar waters the ship has sufficient number of persons meeting the appropriate training requirements for polar waters to cover all watches;
 - .3 this person(s) is subject to the Administration's minimum hours of rest requirements at all times;.
 - .4 when operating in waters other than open waters or bergy waters, the master, chief mate and officers in charge of a navigational watch on passenger ships and tankers shall meet the applicable basic training requirements noted in the above table; and
 - .5 when operating in waters with ice concentration of more than 2/10, the master, chief mate and officers in charge of a navigational watch on cargo ships other than tankers shall meet the applicable basic training requirements noted in the above table.
- 12.3.3 The use of a person other than the officer of the navigational watch to satisfy the requirements for training does not relieve the master or officer of the navigational watch from their duties and obligations for the safety of the ship.
- **12.3.4** Every crew member shall be made familiar with the procedures and equipment contained or referenced in the PWOM² relevant to their assigned duties.

_

² Polar Waters Operating Manual (PWOM).

Enclosure (2) AMENDMENTS TO THE STCW CONVENTION AND CODE DEFINING THE MINIMUM STANDARDS OF COMPETENCE IN BASIC AND ADVANCED TRAINING FOR SHIPS OPERATING IN POLAR WATERS³

The information in this enclosure contains the amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW) and the Seafarers' Training, Certification and Watchkeeping (STCW) Code. These amendments support the training requirements of the International Code for Ships Operating in Polar Waters (Polar Code).

1 GENERAL

These amendments were approved by IMO at the ninety fifth session of the Maritime Safety Committee in June of 2015, and were adopted in July 2016 into the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW) and the Seafarers' Training, Certification and Watchkeeping (STCW) Code. The amendments will enter into force on July 1, 2018.

2 Amendments to the STCW Convention

CHAPTER I

General provisions

- 1 In regulation I/1.1, the following new definitions are added:
- ".42 *Polar Code* means the International Code for Ships Operating in Polar Waters, as defined in SOLAS regulation XIV/1.1.
- .43 *Polar waters* means Arctic waters and/or the Antarctic area, as defined in SOLAS regulations XIV/1.2 to XIV/1.4."
- 2 In regulation I/11, after the existing paragraph 3, the following new paragraph is inserted and the subsequent paragraphs are renumbered accordingly:
 - "4 Every master or officer shall, for continuing seagoing service on board ships operating in polar waters, meet the requirements of paragraph 1 of this regulation and be required, at intervals not exceeding five years, to establish continued professional competence for ships operating in polar waters in accordance with section A-1/11, paragraph 4 of the STCW Code."

³ For information on how to obtain a complete copy of these documents, please see http://www.imo.org/en/Publications/Pages/Home.aspx.

CHAPTER V

Special training requirements for personnel on certain types of ships

4. In chapter V, the following new regulation is added:

"Regulation V/4

Mandatory minimum requirements for the training and qualifications of masters and deck officers on ships operating in polar waters.

- Masters, chief mates and officers in charge of a navigational watch on ships operating in polar waters shall hold a certificate in basic training for ships operating in polar waters, as required by the Polar Code.
- 2 Every candidate for a certificate in basic training for ships operating in polar waters shall have completed an approved basic training for ships operating in polar waters and meet the standard of competence specified in section A-V/4, paragraph 1, of the STCW Code.
- 3 Masters and chief mates on ships operating in polar waters, shall hold a certificate in advanced training for ships operating in polar waters, as required by the Polar Code.
- 4 Every candidate for a certificate in advanced training for ships operating in polar waters shall:
 - .1 meet the requirements for certification in basic training for ships in polar waters;
 - .2 have at least two (2) months of approved seagoing service in the deck department, at management level or while performing watchkeeping duties at the operational level, within polar waters or other equivalent approved seagoing service; and
 - .3 have completed approved advanced training for ships operating in polar waters and meet the standard of competence specified in section A-V/4, paragraph 2 of the STCW Code.
- Administrations shall ensure that a Certificate of Proficiency is issued to seafarers who are qualified in accordance with paragraphs 2 or 4, as appropriate.

Transitional provisions

- 6 Until 1 July 2020, seafarers who commenced approved seagoing service in polar waters prior to 1 July 2018 shall be able to establish that they meet the requirements of paragraph 2 by:
 - .1 having completed approved seagoing service on board a ship operating in polar waters or equivalent approved seagoing service, performing duties in the deck department at the operational or management level, for a period of at least three months in total during the preceding five years; or
 - .2 having successfully completed a training course meeting the training guidance established by the Organization for ships operating in polar waters.*
- 7 Until 1 July 2020, seafarers who commenced approved seagoing service in polar waters prior to 1 July 2018 shall be able to establish that they meet the requirements of paragraph 4 by:
 - .1 having completed approved seagoing service on board a ship operating in polar waters or equivalent approved seagoing service, performing duties in the deck department at management level, for a period of at least three months in total during the preceding five years; or
 - .2 having successfully completed a training course meeting the training guidance established by the Organization for ships operating in polar waters* and having completed approved seagoing service on board a ship operating in polar waters or equivalent approved seagoing service, performing duties in the deck department at the management level, for a period of at least two months in total during the preceding five years."

^{*}Refer to Section B-V/g of the STCW Code.

^{*}Refer to Section B-V/g of the STCW Code.

3 Amendments to the STCW Code

CHAPTER I

General provisions

- In section A-I/11, after the existing paragraph 3, a new paragraph 4 is added as follows:
- "4 Continued professional competence for masters and officers on board ships operating in polar waters, as required under regulation I/11, shall be established by:
 - .1 approved seagoing service, performing functions appropriate to the certificate held, for a period of at least two months in total during the preceding five years; or
 - .2 having performed functions considered to be equivalent to the seagoing service required in paragraph 4.1; or
 - .3 passing an approved test; or
 - .4 successfully completing an approved training course or courses."

CHAPTER V -

Standards regarding special training requirements for personnel on certain types of ships

4 A new section A-V/4 is added as follows:

"Section A-V/4

Mandatory minimum requirements for the training and qualifications of masters and deck officers on ships operating in polar waters

Standard of competence

- 1 Every candidate for certification in basic training for ships operating in polar waters shall be required to:
 - .1 demonstrate the competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-V/4-1; and
 - .2 provide evidence of having achieved:
 - .1 the minimum knowledge, understanding and proficiency listed in column 2 of table A-V/4-1; and

- .2 the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-V/4-1.
- 2 Every candidate for certification in advanced training for ships operating in polar waters shall be required to:
 - .1 demonstrate the competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-V/4-2; and
 - .2 provide evidence of having achieved:
 - .1 the minimum knowledge, understanding and proficiency listed in column 2 of table A-V/4-2; and
 - .2 the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-V/4-2.

Table A-V/4-1

Specification of minimum standard of competence in basic training for ships operating in polar waters

Column One	Column Two	Column Three	Column Four
Competence	Knowledge,	Methods for	Criteria for
	Understanding,	demonstrating	evaluating
	proficiency	competence	competence
Contribute to safe	Basic knowledge of	Examination and	Identification of ice
operation of vessels	ice characteristics	assessment of	properties and their
operating in polar	and areas where	evidence obtained	characteristics of
waters	different type of ice	from one or more of	relevance for safe
	can be expected in	the following:	vessel operation.
	the area of		
	operation:	1. approved in-	Information
		service experience	obtained from ice
	1. Ice physics,		information and
	terms, formation,	2. approved training	publications is
	growth, aging and	ship experience	interpreted correctly
	stage of melt;		and properly
		3. approved	applied.
	2. Ice types and	simulator training,	
	concentrations;	where appropriate	Use of visible and
	0 T		infrared satellite
	3. Ice pressure and	4. approved training	images.
	distribution;		TT C 1
	4 E		Use of egg charts.
	4. Friction from		Cambination of
	snow covered ice.		Coordination of
	5 Implications of		meteorological and
	5. Implications of spry-icing; danger		oceanographic data with ice data.
	of icing up,		with ice data.
	precautions to avoid		Measurements and
	icing up and options		observations of
	during icing up;		weather and ice
	during ronig up,		conditions are
	6. Ice regimes in		accurate and
	different regions.		appropriate for safe
	Significant		passage
	differences between		r
	the Arctic and the		

Antarctic, first year and multiyear ice, sea ice and land ice; 7. Use of ice imagery to recognize consequences of rapid change in ice and weather conditions; 8. Knowledge of ice sky and water blink; 9. Knowledge of differential movement of icebergs and pack ice; 10. Knowledge of tides and currents in ice; 11. Knowledge of effect of wind and current on ice.		
Basic knowledge of vessel performance in ice and low air temperature: 1. Vessel characteristics; 2. Vessel types, hull designs; 3. Engineering requirements for operating in ice;	Examination and assessment of evidence obtained from one or more of the following: 1. approved inservice experience 2. approved training ship experience	Identification of vessel characteristics and limitations under different ice conditions and cold environmental impact. Procedures are made for risk assessment before entering ice.

Subj: GUIDELINES FOR QUALIFICATIONS OF PERSONNEL FOR ISSUING STCW ENDORSEMENTS FOR BASIC AND ADVANCED POLAR CODE OPERATIONS

	3. approved	Awareness of fresh
4. Ice strengthening	simulator training,	water ballast
requirements;	where appropriate	freezing in ballast
,	11 1	tanks.
5. Limitations of	4. approved training	
ice-classes;		Actions are carried
		out in accordance
6. Winterization and		with accepted
preparedness of		principles and
vessel, including		procedures to
deck and engine;		prepare the vessel
		and the crew for
7. Low-temperature		operations in
system		ice and low air
performance;		temperature.
8. Equipment and		Communications
machinery		are clear, concise
limitation in ice		and effective at all
condition and low		times in a
air temperature;		seamanlike manner.
9. Monitoring of ice		
pressure on hull;		
10.0		
10. Sea suction,		
water intake,		
superstructure		
insulation and		
special systems.	P ' 1	II D 1 C 1
Basic knowledge	Examination and	Use Polar Code and
and ability to	assessment of	Polar Water
operate and	evidence	Operations Manual
manoeuvre a ship in	obtained from one	to correctly
ice:	or more of the	determine the
1 C.f	following:	recommended
1. Safe speed in the	1	procedures to
presence of ice and	1. approved in-	load/offload
icebergs;	service experience	cargo/passengers in
2 Dallant to1-	2	low temperatures,
2. Ballast tank	2. approved training	monitor ballast
monitoring;	ship experience	water for icing,
		monitor engine

3. Cargo operations in the polar waters;4. Awareness of engine loads and cooling problems;5. Safety procedures during ice transit.	3. approved simulator training, where appropriate 4. approved training	temperatures, anchor watch concerns in ice, and transit near ice. Interpretation and analysis of information from radar is in accordance with sharp lookout and with special caution regarding identification of dangerous ice features. Information obtained from navigational charts, including electronic charts, and publications is relevant, assessed, interpreted correctly and properly applied. The primary method of position fixing is frequent and the most appropriate for the prevailing conditions and routing through ice.
		Performance checks and tests of navigation and communication systems comply with recommendations for high latitude and

Subj: GUIDELINES FOR QUALIFICATIONS OF PERSONNEL FOR ISSUING STCW ENDORSEMENTS FOR BASIC AND ADVANCED POLAR CODE OPERATIONS

			low air temperature operation.
Monitor and ensure compliance with legislative requirements	Basic knowledge of regulatory considerations: 1. Antarctic Treaty and the Polar Code; 2. Accident reports concerning vessels in polar waters; 3. IMO standards for operation in remote areas;	Examination and assessment of evidence obtained from one or more of the following: 1. approved inservice experience 2. approved training ship experience 3. approved simulator training, where appropriate 4. approved training	Locate and apply relevant portion of the Polar Water Operational Manual Communication is in accordance with local/regional and international standard procedures. Legislative requirements related to relevant regulations, codes and practices are identified.
Apply Safe working practices respond to emergencies	Basic knowledge of crew preparation, working conditions and safety: 1. Recognize limitations of search and rescue readiness and responsibility, including radio area A4 and its SAR communication facility limitation; 2. Awareness of contingency planning;	Examination and assessment of evidence obtained from one or more of the following: 1. approved inservice experience 2. approved training ship experience 3. approved simulator training, where appropriate 4. approved training	Identification and initial actions on becoming aware of hazardous situations for vessel and individual crew members. Actions are carried out in accordance with Polar Water Operational Manual, accepted principles and procedures to ensure safety of operations and avoid pollution to the marine environment.

ENDORSEMENTS IN	OK DASIC AND ADV	ANCED I OLAR COL	L OI LICATIONS
	3. How to establish		
	and implement safe		Safe working
	working procedures		practices are
	for crew specific to		observed and
	polar environments		appropriate safety
	such as low temps,		and protective
	ice covered surfaces		equipment is
	, personal protective		correctly used at all
	equipment, use of		times.
	buddy system, and		
	working time		Response actions
	limitations;		are in accordance
	,		with established
	4. Recognize		plans and are
	dangers when crews		appropriate to the
	are exposed to low		situation and nature
	temperatures;		of the emergency.
	5. Human factors		Correctly identifies
	including cold		and applies
	fatigue, medical-		legislative
	first aid aspects,		requirements related
	crew welfare;		to relevant
	,		regulations, codes
	6. Survival		and practices.
	requirements		_
	including the use of		Appropriate safety
	personal survival		and protective
	equipment and		equipment is
	group survival		correctly used
	equipment;		·
			Defects and
	7. Awareness of the		damages are
	most common hull		detected and
	and equipment		
	damages and how to		properly reported
	avoid these;		
	8. Superstructure-		
	deck icing,		
	including effect on		
	stability and trim;		

Subj: GUIDELINES FOR QUALIFICATIONS OF PERSONNEL FOR ISSUING STCW ENDORSEMENTS FOR BASIC AND ADVANCED POLAR CODE OPERATIONS

	9. Prevention and removal of ice including the factors of accretion; 10. Recognize fatigue problems due to noise and vibrations; 11. Identify need for extra resources, such as bunker, food, and extra clothing.		
Ensure compliance with pollution-prevention requirements and prevent environmental hazards	Basic knowledge of environmental factors and regulations: 1. Identify particular sensitive sea areas regarding discharge; 2. Identify areas where shipping is prohibited or should be avoided; 3. Special areas in MARPOL; 4. Recognize limitations oil-spill equipment; 5. Plan for coping with increased volumes of garbage, bilge water, sewage, etc.;	Examination and assessment of evidence obtained from one or more of the following: 1. approved inservice experience 2. approved training ship experience 3. approved simulator training, where appropriate 4. approved training	Legislative requirements related to relevant regulations, codes and practices are identified. Correctly identify/select the limitations on vessel discharges contained in the Polar Code. Correctly applies Polar Water Operations Manual/ Waste Management Plan to determine limitations on vessel discharges and plans for storing waste Identify references that detail areas to be avoided, such as

i 77 F	6. Lack of infrastructure. 7. Oil spill and pollution in ice, including consequences;	wild life refuge, ecological heritage parks, migratory pathways, etc. (MARPOL, Antarctic Treaty, etc.)
	consequences,	Identify factors that must be considered to manage waste stream during Polar voyages

Table A-V/4-1

Specification of minimum standard of competence in advanced training for ships operating in polar waters

Column One	Column Two	Column Three	Column Four
Competence	Knowledge, Understanding, proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Plan and conduct a voyage in Polar Waters	Knowledge of voyage planning and reporting: 1. Information sources; 2. Reporting regimes in polar	Examination and assessment of evidence obtained from one or more of the following: 1. approved inservice experience	The equipment, charts and nautical publications required for the voyage are enumerated and appropriate to the safe conduct of the voyage.
	waters; 3. Development of safe routing and passage planning to avoid ice where possible; 4. Ability to recognize the limitations of hydrographic	 approved training ship experience. approved simulator training, where appropriate. approved training 	The reasons for the planned route are supported by facts obtained from relevant sources and publications, statistical data and limitations of communication and navigational systems.
	information and charts in polar regions and whether the information is suitable for safe navigation; 5. Passage planning deviation and modification for dynamic ice conditions;		Voyage plan correctly identified relevant polar regulatory regimes and need for icepilotage or/and icebreaker assistance. All potential navigational hazards

Knowledge of	are accurately identified.
equipment	identified.
limitations:	Positions, courses, distances and time
1. Understand and identify hazards associated with limited terrestrial navigational aids in polar regions;	calculations are correct within accepted accuracy standards for navigational equipment.
2. Understand and recognize high latitude errors on compasses;	
3. Understand and identify limitations in discrimination of radar targets and ice-features in ice-clutter;	
4. Understand and recognize limitations of electronic positioning systems at high latitude;	
5. Understand and recognize limitations in nautical charts and pilot descriptions;	
6. Understand and recognize limitations in communication systems.	

Subj: GUIDELINES FOR QUALIFICATIONS OF PERSONNEL FOR ISSUING STCW ENDORSEMENTS FOR BASIC AND ADVANCED POLAR CODE OPERATIONS

Manage the safe operation of vessels operating in polar waters	Knowledge and ability to operate and manoeuvre a ship in ice: 1. Preparation and risk assessment before approaching ice, including presence of icebergs, and taking into account wind,	Examination and assessment of evidence obtained from one or more of the following: 1. approved inservice experience 2. approved training ship experience.	All decisions concerning navigating in ice are based on a proper assessment of the ship's manoeuvring and engine characteristics and the forces to be expected while navigating within a polar waters.
	darkness, swell, fog and pressure ice; 2. Conduct communications with an icebreaker and other vessels in the area and with Rescue Coordination Centres 3. Understand and describe the conditions for the safe entry and exit to and from ice or open water, such as leads or cracks, avoiding icebergs and dangerous ice conditions and maintaining safe distance to icebergs 4. Understand and describe ice	3. approved simulator training, where appropriate. 4. approved training	Demonstrate communications skills, request ice routing, plot and commence voyage through ice. All potential ice hazards are correctly identified. All decisions concerning berthing anchoring, cargo and ballast operations are based on a proper assessment of the ships manoeuvring and engine characteristics and the forces to be expected and in accordance with the Polar Code guidelines and
	ramming procedures – including double and single ramming passage;		applicable international agreements.

5. Recognize and
determine the need
for bridge watch
team augmentation
based upon
environmental
conditions, vessel
equipment and
vessel ice class;

- 6. Recognize the presentations of the various ice conditions as they appear on radar.
- 7. Understand icebreaker convoy terminology, and communications, and take icebreaker direction and move in convoy;
- 8. Understand methods to avoid besetment and to free beset vessel, and consequences of besetment;
- 9. Understand towing and rescue in ice, including risks associated with operation;
- 10. Handling ship in various ice concentration and coverage, including risks associated with

Safely demonstrate progression of a vessel through ice, manoeuvring vessel through moderate ice concentration (range of 1/10 to 5/10).

Safely demonstrate progression of a vessel through ice, manoeuvring vessel through dense ice concentration (range of 6/10 to 10/10).

Operations are planned and carried out in accordance with established rules and procedures to ensure safety of operation and avoid pollution of the marine environment.

Safety of navigation is maintained through sailing strategy and adjustment of ship's speed and heading through different types of ice.

Actions are understood to permit use of anchoring system in cold temperatures

navigation in ice, and turning- backing; avoidance; etc.; 11. Use of different type of propulsion and rudder systems, including limitations to avoid damage when operating in ice;	Actions are carried out in accordance with accepted principles and procedures to prepare for icebreaker towing, including notch towing.
12. Use of heeling and trim-systems.; hazards in connection with ballast and trim in relation with ice;	
13. Docking and undocking in ice covered waters, including hazards associated with operation and the various techniques to safely and undock in ice covered waters;	
14. Anchoring in ice, including the dangers to anchoring system – ice accretion to hawse pipe and ground tackle;	
15. Recognize conditions which impact polar visibility and may	

Subj: GUIDELINES FOR QUALIFICATIONS OF PERSONNEL FOR ISSUING STCW ENDORSEMENTS FOR BASIC AND ADVANCED POLAR CODE OPERATIONS

Maintain safety of the ship's crew and passengers and the	give indication of local ice and water conditions, including sea smoke, blink and refraction. Knowledge of safety:	Examination and assessment of evidence	Response measures are in accordance with established
operational condition of life-saving, firefighting and other safety systems	1. Understand the procedures and techniques for abandoning the ship and survival on the ice and in ice-covered waters; 2. Recognize limitations on fire-fighting systems and life saving appliances due to low air temperatures,	obtained from one or more of the following: 1. approved inservice experience 2. approved training ship experience. 3. approved simulator training, where appropriate. 4. approved training.	plans and procedures, and are appropriate to the situation and nature of the emergency.
	3. Understand unique concerns in conducting emergency drills in ice and low temperatures; 4. Understand unique concerns in conducting emergency response in ice and low air and water temperatures.		

Enclosure (3) Qualification and Application for STCW Endorsements for Basic Polar Code Operations

1. Qualification for Endorsements:

- a. To qualify for an STCW endorsement in Basic Polar Code Operations applicants should provide evidence of satisfactory completion of a Coast Guard approved course in Basic Polar Code Operations. The course should meet the training and standard of competence specified in section A-V/4 paragraph 1 of the STCW Code. (See Enclosure 2 to this document).
- b. Mariners who met the training and standard of competence for Basic training specified in the previously published CG-OES Policy Letter No. 01-16, will be considered to have met the requirement of paragraph 1(a) of this enclosure for an original endorsement. This training should be documented via course completion certificates or company letters.
- 2. **Application for New Endorsements:** Applications should be submitted in accordance with the requirements of 46 CFR 10.209 noting the following information:
 - a. A chemical test as described in 46 CFR 10.231(b) is not required for this endorsement
 - b. As per 46 CFR 10.219 there are no fees associated with the issuance of this endorsement
 - c. As per 46 CFR 10.231(c)(1) a completed signed CG-719B "Application for Merchant Mariner Credential" is required
 - d. As per 46 CFR 10.231(c)(2) proof that the mariner either holds a valid TWIC or has applied for a TWIC is required
 - e. Sea service letters should be submitted in accordance with 46 CFR 10.232 and should include the number of days served on a vessel operating in polar waters.
 - f. Applicants should hold an STCW endorsement as Master, Chief Mate or OICNW listed in 46 CFR 11.304.
- 3. **Renewal of Endorsements**: To renew an STCW Endorsement for Basic Polar Code Operations, a mariner must meet the applicable requirements in 46 CFR 10.227 to renew their national endorsement and provide evidence of maintaining the standard of competence: through one of the following:
 - a. Complete approved or accepted refresher training that includes Basic Polar Code Operations; or
 - b. Provide evidence of being a qualified instructor who has taught a Coast Guard-approved or accepted course for Basic or Advanced Polar Code Operations at least twice within the past 5 years, therefore meeting the standards needed to receive a course completion certificate for that course; or
 - c. Provide evidence of having completed 2 months of seagoing service as deck officer within the previous 5 years on a vessel(s) operating within polar waters.
- 4. **Endorsements:** Qualified Applicants will have their MMC endorsed with STCW Regulation V/4-1 and a capacity of Basic Polar Code Operations. Endorsements will be issued for a period that coincides with the validity period of the MMC as per 46 CFR 10.231(b) unless the mariner submits an application for a renewal in accordance with 46 CFR 10.227.

CH-1 Encl (3)

Enclosure (4) Qualification and application for STCW Endorsements for Advanced Polar Code Operations

1. Qualification for Endorsements:

- a. To qualify for an STCW endorsement in Advanced Polar Code Operations applicants should provide evidence of satisfactory meeting the requirements for an endorsement in Basic Polar Code Operations as described in enclosure (3); and
- b. Provide evidence of completion of a Coast Guard approved course in Advanced Polar Code Operations. The course should meet the training and standard of competence specified in section A-V/4 paragraph 2 of the STCW Code (See Enclosure 2 to this document); and
- c. Provide evidence of 2 months of seagoing service at the management level or as an Officer in Charge of Navigational Watch (OICNW), as defined in 46 CFR 10.107 while operating in polar waters.
- d. Mariners who have met the training and standard of competence for Advanced training specified in the previously published CG-OES Policy Letter No. 01-16, will be considered to have met the requirement of paragraph 1(b) of this enclosure for an original endorsement. This training should be documented via course completion certificates or company letters.
- **2. Application for New Endorsements:** Applications should be submitted in accordance with the requirements of 46 CFR 10.209 noting the following information:
 - a. A chemical test as described in 46 CFR 10.231(b) is not required for this endorsement
 - b. As per 46 CFR 10.219 there are no fees associated with the issuance of this endorsement
 - c. As per 46 CFR 10.231(c)(1) a completed signed CG-719B "Application for Merchant Mariner Credential" is required
 - d. As per 46 CFR 10.231(c)(2) proof that the mariner either holds a valid TWIC or has applied for a TWIC is required
 - e. Sea service letters should be submitted in accordance with 46 CFR 10.232 and should include the number of days served on a vessel operating in polar waters.
 - f. Applicants should hold an STCW endorsement for Master, Chief Mate or OICNW listed in 46 CFR 11.304.
- 3. **Renewal of endorsements**. To renew an STCW Endorsement for Advanced Polar Code Operations, a mariner must meet the applicable requirements in 46 CFR 10.227 to renew their national endorsement and provide evidence of maintaining the standard of competence through one of the following:
 - a. Complete an approved or accepted refresher training in Advanced Polar Code operations; or
 - b. Provide evidence of being a qualified instructor who has taught a Coast Guard-approved or accepted course for Advanced Polar Code Operations at least twice within the past 5 years; or
 - c. Provide evidence of having completed 2 months of seagoing service at the management level within the previous 5 years on a vessel(s) operating within polar waters.
- 4. **Endorsements:** Qualified Applicants will have their MMC endorsed with STCW Regulation V/4-2 and a capacity of Advanced Polar Code Operations. Endorsements will be issued for a period that coincides with the validity period of the MMC as per 46 CFR 10.231(b) unless the mariner submits an application for a renewal in accordance with 46 CFR 10.227.

 $\operatorname{CH-1}$ Encl (4)