U.S. Department of Homeland Security

United States Coast Guard



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NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 14-14

Subj: GUIDELINES ON QUALIFICATION FOR STCW ENDORSEMENTS AS ABLE SEAFARER-DECK

- Ref: (a) International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, (STCW), as amended, Regulation II/5 and Section A-II/5 of the STCW Code, incorporated into regulations at Title 46 Code of Federal Regulations (CFR), Part 12.103
- 1. <u>PURPOSE</u>. This Navigation and Vessel Inspection Circular (NVIC) provides guidance on qualification for and revalidation of STCW endorsements as Able Seafarer-Deck (AS-D).
- <u>ACTION</u>. The Coast Guard will use this NVIC and 46 CFR 12.603 when establishing whether candidates are qualified to hold STCW endorsements as AS-D. Officers in Charge, Marine Inspection (OCMIs) should bring this NVIC to the attention of the maritime industry within their zones of responsibility. This NVIC is available on the World Wide Web at <u>http://www.uscg.mil/hq/g-m/nvic/</u>. The Coast Guard will distribute it by electronic means only.
- 3. <u>DIRECTIVES AFFECTED</u>. Those portions of CG-CVC Policy Letter 12-07, *Guidance on Issuance of Endorsements and Approval of Training to Meet the 2010 Amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as Amended (STCW), that are applicable to AS-D are cancelled.*

4. BACKGROUND.

a. The STCW Convention and STCW Code set forth standards for training and certification for merchant mariners.

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- b. The International Maritime Organization (IMO) amended the STCW Convention and STCW Code on June 25, 2010. These amendments entered into force for all ratifying countries, including the United States, on January 1, 2012, and include the establishment of certain new endorsements, including Able Seafarer-Deck.
- c. The Convention is not self-implementing; therefore, the U.S., as a signatory to the STCW Convention, initiated regulatory changes to ensure full implementation of the amendments to the STCW Convention and STCW Code. The U.S. implements these provisions under the Convention and under the authority of United States Code, Titles 33 and 46. The Coast Guard published a final rule in the Federal Register on December 24, 2013, (78 FR 77796) that implements the STCW, including the 2010 amendments. This rule became effective on March 24, 2014.
- d. The Coast Guard is publishing this NVIC to provide guidance on complying with the new regulations and is cancelling previous policy. Accordingly, this NVIC cancels those portions of CG-CVC Policy Letter 12-07 that are applicable to AS-D.

5. DISCUSSION.

- a. Policy regarding endorsement as AS-D is located in this NVIC. Enclosure (1) details specific qualification requirements for this endorsement. Enclosure (2) contains the national assessment guidelines for this endorsement. Enclosure (3) may be used to record completion of assessments. Enclosure (4) provides relevant excerpts from the STCW Convention and STCW Code.
- b. When assessing demonstrations of skills, Qualified Assessors (QAs) are encouraged to use the guidelines in Enclosure (2) or an approved alternative. Shipboard QAs may make minor changes to the assessments in Enclosure (2) to reflect differences in shipboard equipment and operating procedures. QAs may not make other changes unless prior approval is given by the National Maritime Center (NMC) (46 CFR 12.601(a)(1)(i)).
- c. A training institution applying for approval of a course or program that leads to an endorsement as AS-D should state either that the guidelines in Enclosure (2) will apply, or provide the guidelines it proposes to use. Under 46 CFR 10.402(e), a training institution or a QA must submit any deviations from these guidelines to the Coast Guard for approval before use.
- d. When applying for an AS-D endorsement, the applicant need only submit the completed Enclosure (3), Record of Assessment (or equivalent evidence of demonstration of competency), to the Coast Guard. The Coast Guard recommends that the applicant retain a copy of Enclosure (3) (or equivalent evidence of demonstration of competency) for his or her records.
- 6. <u>DISCLAIMER</u>. 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 with the applicable

law. Alternatives can be used with prior approval 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
 D. 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.
- 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.
- <u>RECORDS MANAGEMENT CONSIDERATIONS</u>. 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 Records 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.
- <u>QUESTIONS</u>. All questions regarding implementation of this NVIC should be directed to the Mariner Credentialing Program Policy Division (CG-CVC-4), at (202) 372-2357 or <u>MMCPolicy@uscg.mil</u>. To obtain approval for an alternative to the assessments described in Enclosure (2), contact the NMC at (888) 427-5662 or <u>IAskNMC@uscg.mil</u>.

J. A. SERVIDIO Rear Admiral, U. S. Coast Guard Assistant Commandant for Prevention Policy

- Encl: (1) Discussion of Qualification Requirements for Able Seafarer-Deck
 - (2) Assessment Guidelines for Able Seafarer-Deck
 - (3) Record of Assessment for Able Seafarer-Deck
 - (4) Excerpts from STCW Convention and STCW Code

DISCUSSION OF QUALIFICATION REQUIREMENTS FOR ABLE SEAFARER-DECK

1. <u>GENERAL</u>. This enclosure provides guidance to qualify for an International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW) endorsement as Able Seafarer-Deck (AS-D) as specified in 46 Code of Federal Regulations (CFR) 12.603.

2. <u>SEA SERVICE AND TRAINING</u>.

- a. As specified in 46 CFR 12.603(a), to qualify for an AS-D endorsement a mariner must:
 - Meet the requirements for an endorsement as a Rating Forming Part of a Navigational Watch (RFPNW). It is not necessary to hold the endorsement for RFPNW, but all training, sea service and/or assessments required for RFPNW must be completed before accruing the sea service for AS-D;
 - 2) While qualified as RFPNW have either 18 months of seagoing service in the deck department, or 12 months of seagoing service in the deck department with completed approved training;
 - 3) Meet the standard of competence specified in Table A-II/5 of the STCW Code;
 - 4) Complete approved training for Proficiency in Survival Craft and Rescue Boats other than Fast Rescue Boats (PSC) or Proficiency in Survival Craft and Rescue Boats other than Lifeboats or Fast Rescue Boats (PSC-Limited); and
 - 5) Have currently valid Basic Training (46 CFR 12.602).
- b. Mariners holding a rating endorsement as able seaman before January 1, 2017, will be eligible for this endorsement if they:
 - 1) Hold an endorsement as RFPNW and have completed approved training for PSC or PSC-Limited (46 CFR 12.603(c)); and
 - 2) Have currently valid Basic Training (46 CFR 12.602).
- c. Mariners may qualify for an endorsement as AS-D <u>until January 1, 2017</u>, if they have:
 - Served as a watchstanding Able Seaman, or as a RFPNW for a period of not less than 12 months within the 60 months prior to application for the endorsement (46 CFR 12.603(b)); and
 - 2) Currently valid Basic Training (46 CFR 12.602).
- d. Mariners who qualify for AS-D under paragraph 2.c above qualify for endorsement as RFPNW.
- 3. <u>ASSESSMENT</u>. As set forth in 46 CFR 12.603(a)(4), mariners qualifying for an endorsement as described in paragraph 2.a above must demonstrate having achieved the

standards of competence in Table A-II/5 of the STCW Code. Mariners may demonstrate achieving the standards of competence by completing the assessments in Enclosure (2), or an equivalent alternative.

4. <u>RENEWAL OF ENDORSEMENT</u>. In order to renew an endorsement as AS-D, an applicant must have currently valid Basic Training as set forth in 46 CFR 12.602 and meet the general requirements for renewal of their national able seaman endorsement found in 46 CFR 10.227.

Assessment Guidelines for Able Seafarer-Deck

Standard of Competence

As is specified in 46 Code of Federal Regulations (CFR) 12.603(a)(4), every candidate for certification as Able Seafarer-Deck (AS-D) shall provide evidence of having achieved the required standard of competence as specified in Table A-II/5 of the STCW Code. The table below is adopted from Table A-II/5 of the STCW Code (found in Enclosure (4)) to assist the candidate and assessor in the demonstration of competency.

Practical Skill Demonstrations

These assessment guidelines establish the conditions under which the assessment will occur, the performance or behavior the candidate is to demonstrate, and the standards against which the performance is measured.

Qualified Assessors

A shipboard Qualified Assessor (QA) who witnesses a practical demonstration may sign the appropriate blocks and pages in the Record of Assessment in Enclosure (3) or an equivalent record. All assessments must be signed by a QA approved by the Coast Guard in accordance with 46 CFR 10.405. In order to facilitate the transition to this new requirement, the Coast Guard will accept assessments that have been demonstrated in the presence of and signed by an assessor who has not been Coast Guard approved until December 31, 2016, provided that the assessor meets the professional requirements in 46 CFR 10.405(a)(3) to assess competence for the specific endorsement. Assessors must be in possession of the level of endorsement, or other professional credential, which provides proof that he or she has attained a level of experience and qualification equal or superior to the relevant level of knowledge, skills, and abilities to be assessed (46 CFR 10.405(a)(3)). In the interim, the Coast Guard will accept assessments signed by mariners who hold an appropriate national endorsement and have at least 1 year of experience as the officer in charge of a navigational watch on vessels greater than 200 GRT or 500 GT. After December 31, 2016, QAs must be approved by the National Maritime Center to conduct the assessment (46 CFR 10.405).

Notes

The following notes are referred to in the "Task No." column of the assessment table that follows:

- *RFPNW* The assessments are met by holding or qualifying for an STCW endorsement as Rating Forming Part of a Navigational Watch (RFPNW).
- *Course* The assessment may only be satisfied by successful completion of a Coast Guard approved or accepted course.

Assessment Guidelines for Able Seafarer-Deck

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.1.A <i>RFPNW</i>	Contribute to a safe navigational watch	Ability to understand orders and to communicate with the officer of the watch in matters relevant to watch keeping duties	This KUP is satisfied if	the mariner holds or has c	ualified for an endorsement as RFPNW.
1.2.A <i>RFPNW</i>	Contribute to a safe navigational watch	Procedures for the relief, maintenance, and handover of a watch	This KUP is satisfied if	the mariner holds or has c	ualified for an endorsement as RFPNW.
1.3.A <i>RFPNW</i>	Contribute to a safe navigational watch	Information required to maintain a safe watch	This KUP is satisfied if	the mariner holds or has c	ualified for an endorsement as RFPNW.
2.1.A	Contribute to berthing, anchoring and other mooring operations	Working knowledge of the mooring system and related procedures including the function of mooring and tug lines and how each line functions as part of an overall system	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes the functions of the mooring and tug lines.	 The candidate's description includes established safety practices and equipment operating instructions applicable to the following lines and how these lines function as part of an overall system: 1. Spring lines; 2. Breast lines; and 3. Head and stern line.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.1.B	Contribute to berthing, anchoring and other mooring operations	Working knowledge of the mooring system and related procedures, including the function of mooring and tug lines and how each line functions as part of an overall system	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes the characteristics of mooring equipment.	The candidate's description includes the safe practices involving mooring wires, synthetic, and fiber lines, winches, anchor windlasses, capstans, bitts, chocks, and bollards.
2.2.A	Contribute to berthing, anchoring and other mooring operations	Working knowledge of the mooring system and related procedures, including the capacities, safe working loads, and breaking strengths of mooring equipment, including mooring wires, synthetic and fiber lines, winches, anchor windlasses, capstans, bitts, chocks, and bollards	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes characteristics of various lines including wire ropes.	 The candidate's description includes: 1. Nature of various lines including: a. Natural fiber lines; b. Nylon line; c. Polypropylene line; and d. Wire lines; 2. Combining wire and synthetic lines should only be done by using a thimble; 3. Braided vs. laid line; and 4. Need for and placement of chafing gear.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.2.B	Contribute to berthing,	Working knowledge of the mooring system and	On board a ship, when questioned by a	the candidate describes various	The candidate's description includes:
	anchoring and	related procedures,	Qualified Assessor,	anchoring operations.	1. Preparing for letting go anchor;
	other mooring operations	including the capacities, safe working loads, and			2. Backing out the anchor with the anchor windlass engaged;
		breaking strengths of mooring equipment, including mooring wires,			3. Taking the anchor windlass out of gear with the anchor windlass brake engaged;
		synthetic and fiber lines,			4. Letting go the anchor;
		winches, anchor windlasses, capstans, bitts, chocks, and bollards			5. Paying out the anchor chain as directed, but under control;
		chocks, and bonards			6. Heaving anchor;
					 Cleaning anchor chain and anchor as it is brought aboard; and
					8. Securing the anchor for sea.
2.2.C	Contribute to berthing,	Working knowledge of the mooring system and	On board a ship, when questioned by a	the candidate describes the	The candidate's description includes the use of fittings on deck including:
	anchoring and other mooring	related procedures, including the capacities,	Qualified Assessor,	characteristics and function of deck	1. Bitts:
	operations	safe working loads, and		fittings.	a. Single bitt;
		breaking strengths of mooring equipment,			b. H-bitt; and
		including mooring wires,			c. Cruciform bitt;
		synthetic and fiber lines, winches, anchor			2. Cleats;
		windlasses, capstans, bitts,			3. Padeyes;
		chocks, and bollards			4. Bollards;
					5. Chocks; and
					6. Towing pad.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.2.D	Contribute to berthing, anchoring and other mooring operations	Working knowledge of the mooring system and related procedures, including the capacities, safe working loads, and breaking strengths of mooring equipment, including mooring wires, synthetic and fiber lines, winches, anchor windlasses, capstans, bitts, chocks, and bollards	On board a ship, when questioned by a Qualified Assessor,	the candidate describes the characteristics and function of line handling equipment.	The candidate's description includes the nature of various line handling equipment or machinery on deck, including:1. Capstans;2. Winches; and3. Wildcats.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.3.A	Contribute to berthing, anchoring and other mooring operations	Working knowledge of the mooring system and related procedures, including the procedures and order of events for making fast and letting go mooring and tug lines and wires, including towing lines	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes the mooring system and related procedures and order of events for making fast and letting go the vessel's lines at a specific port.	 The candidate describes in proper order the procedures for berthing the vessel, including: 1. The call out of crewmembers who will be involved on deck; 2. Establishing the person in charge of mooring operations; 3. Pre-mooring conference; 4. Pulling lines and wires on deck to the chocks to be used; 5. Preparing stoppers, heaving lines, and messengers, if used; 6. Exchange of pilots and docking master; 7. Taking tug's lines aboard (if applicable); 8. Passing lines and/or wires between the ship and the pier; 9. Positioning ship (warping); 10. Letting go of tugs; 11. Making fast; 12. Setting up the gangway; 13. Rigging pilots ladder, or ladder-gangway combination; 14. Bringing pilot safely on board; 15. Stowing pilot ladder or ladder-gangway 16. Pilots away; and 17. Securing from berthing operations. NOTE: Particular attention should be paid to the use of safety equipment and precautions to minimize the risk of injury.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.3.B	Contribute to berthing, anchoring and other mooring operations	Working knowledge of the mooring system and related procedures, including the procedures and order of events for making fast and letting go mooring and tug lines and wires, including towing lines	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate describes the mooring system and related procedures, including the procedures and order of events for making fast and letting go mooring and tug lines and wires, at a specific port.	 The candidate describes in proper order the procedures for unberthing the vessel, including: 1. The call out of crewmembers who will be involved on deck; 2. Establishing the person in charge of mooring operations; 3. Bringing pilot aboard; 4. Preparing stoppers, heaving lines, messengers, if used; 5. Taking tug's lines aboard (if applicable); 6. Securing the gangway; 7. Bringing lines and/or wires aboard, as directed; 8. Warping the ship; 9. Letting go of tugs, if applicable; 10. Stowing lines and wires in assigned areas and using proper techniques (faking, rope baskets, coiling, etc.); 11. Exchange of pilots and docking master; and 12. Securing from berthing operations. NOTE: Particular attention should be paid to the use of safety equipment and precautions to minimize the risk of injury.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.4.A	Contribute to berthing, anchoring and other mooring operations	Working knowledge of the mooring system and related procedures, including the procedures and order of events for the use of anchors in various operations	On board ship,	the candidate assists in the anchoring of the vessel.	 The candidate demonstrates anchoring procedures including: 1. Preparing for letting go anchor; 2. Backing out the anchor with the anchor windlass engaged; 3. Taking the anchor windlass out of gear with the anchor windlass brake engaged; 4. Letting go the anchor; 5. Paying out the anchor chain as directed, but under control; 6. Heaving anchor; 7. Cleaning anchor chain and anchor as it is brought aboard; and 8. Securing anchor for sea. NOTE: Particular attention should be paid to the use of safety equipment and precautions to minimize the risk of injury.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.5.A	Contribute to berthing, anchoring and other mooring operations	Working knowledge of the procedures and order of events associated with mooring to a buoy or buoys	On board ship, or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes the procedures and order of events associated with mooring to a buoy or buoys.	 The candidate's description includes: Procedures when using the anchor chain; Procedures when using a special heavy wire rope; Use of messengers; Use of slip ropes; and Particular hazards associated with mooring to a buoy. NOTE: Particular attention should be paid to the use of safety equipment and precautions to minimize the risk of injury.
3.1.A	Contribute to the handling of cargo and stores	Knowledge of procedures for safe handling, stowage, and securing of cargoes and stores, including dangerous, hazardous and harmful substances and liquids	On board ship or in a laboratory, when questioned by a Qualified Assessor about cargo and stores handling procedures,	the candidate describes and demonstrates the safe handling, stowage, and securing of cargoes and stores, including dangerous, hazardous and harmful substances and liquids.	 The candidate: Describes shipboard safety procedures and equipment operating instructions, including securing gear, cargo-handling gear, and the stowage of cargo; Demonstrates lashing a standard load; and Demonstrates securing a non-standard load. NOTE: For this purpose, a non-standard load is a load of unusual shape, weight, and/or is in a location where cargo or stores are not normally located.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.2.A	Contribute to the handling of cargo and stores	Basic knowledge of and precautions to observe in connection with particular types of cargo and identification of IMDG labeling	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes the International Maritime Dangerous Goods Code (IMDG) labels, marks, and signs.	 The candidate's description includes: Hazardous material labels and placards including the general hazards to personnel, the ship, and the environment; Marine pollutant marks; Elevated temperature marks; and Orientation labels.
4.1.A	Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including function and uses of valves and pumps, hoists, cranes, booms, and related equipment	On board ship, or in a laboratory, when given a list of a vessel's deck equipment by a Qualified Assessor,	the candidate describes the operation of deck equipment, including functions and uses of valves, pumps, hoists, cranes, booms, and related equipment.	 The candidate's description includes: 1. Proper use of personal safety equipment; 2. Safety procedures when working with or near valves, pumps, hoists, cranes, booms, and related equipment; and 3. Limitations of the valves, pumps, hoists, cranes, booms, and related equipment including, but not limited to: a. Safe working loads; b. Rigging; and c. Fairleads and swing arcs.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.2.A	Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including function and uses of winches, windlasses, capstans, and related equipment	On board ship or in a laboratory, when given a list of a vessel's deck equipment by a Qualified Assessor	the candidate describes the safe operation of deck equipment, including functions and uses of winches, windlasses, capstans, and related equipment.	 The candidate's description includes: Proper use of personal safety equipment; Safety procedures when working with or near winches, windlasses, capstans; and related equipment; and Limitations of the winches, windlasses, and capstans including, but not limited to: a. Safe working loads; b. Rigging; and c. Fairleads and swing arcs.
4.3.A	Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including hatches, watertight doors, ports, and related equipment	On board ship or in a laboratory,	the candidate demonstrates the safe operation of deck equipment, including hatches, watertight doors, ports, and related equipment.	 The candidate demonstrates the safe operation of hatches, watertight doors, ports, and related equipment including: Use of dogs and other securing devices; Maintenance of sealing material and knife edges to create a watertight seal; Inspection and repair of gouges, fractures, and other damage that may affect the strength or watertight integrity of the opening; Normal operating position of the ship's watertight openings when at sea; and Normal operating position of the ship's watertight openings when in port.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.4.A	Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including fiber and wire ropes, cables and chains, including their construction, use, markings, maintenance, and proper stowage	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate describes the use and maintenance of fiber lines.	 The candidate's description includes: Personal Protective Equipment (PPE) and safe working practices; Warning signs that fiber lines are about to part; Proper stowage of fiber lines; Maintenance of fiber lines; and Limitations in the use of fiber lines.
4.4.B	Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including fiber and wire ropes, cables and chains, including their construction, use, markings, maintenance, and proper stowage	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate describes the safe use and maintenance of synthetic lines.	 The candidate's description includes: PPE and safe working practices; Difference between nylon, polypropylene, polyethylene and aramid line; Difference between laid line and braided line; Warning signs that synthetic lines are about to part; Proper stowage of synthetic lines; Maintenance of synthetic lines; and Limitations in the use of synthetic lines.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.4.C	Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including fiber and wire ropes, cables and chains, including their construction, use, markings, maintenance, and proper stowage	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate describes the safe use and maintenance of wire rope.	 The candidate's description includes: PPE and safe working practices; Warning signs that wire rope is about to part; Specifications and information tags; Proper stowage of wire rope; Maintenance wire rope; and Limitations in the use of wire rope.
4.4.D	Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including fiber and wire ropes, cables and chains, including their construction, use, markings, maintenance, and proper stowage	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate describes the safe use and maintenance of chain.	 The candidate's description includes: PPE and safe working practices; Warning signs that chain is about to part; Proper stowage; Maintenance; and Limitations in the use of chain.
4.5.A	Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including ability to use and understand basic signals for the operation of equipment, including winches, windlasses, cranes, and hoists	On board ship or in a laboratory,	the candidate demonstrates the basic signals for the operation of winches, windlasses, cranes, and hoists.	 The candidate demonstrates the safe operation of winches, windlasses, cranes, and hoists including: 1. Hand signals to communicate instructions and information from supervisors, spotters, and other personnel; and 2. Possible hazards, including: a. Description of hazards; and b. Preventative measures.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.6.A	Contribute to the safe operation of	Knowledge of deck equipment, including ability to operate	On board ship or in a laboratory, during an anchoring operation,	the candidate demonstrates the use of anchoring	The candidate demonstrates the use of anchoring equipment including:
	deck equipment and	anchoring equipment under various conditions,	anenoning of eration,	equipment under various conditions.	 The anchor windlass: a. Placing in gear;
	machinery	such as anchoring, weighing anchor, securing		various conditions.	b. Taking out of gear;
		for sea, and in			c. Use during mooring operations; andd. Use of brake (when heaving mooring lines or
		emergencies			for anchor operations);
					2. Riding pawl;
					3. Wildcat;
					4. Hawse pipe;
					5. Chain locker;
					 Anchor chain attachments (e.g., padeye and pin, shackle);
					7. Spill pipe;
					8. Stripping bar (pawl);
					9. Warping head;
					10. Anchor swivel;
					11. Anchor chain washing operations;
					 Chain stoppers, wire pendants, devil's claws for securing the chain;
					13. Vessel security equipment (e.g., hawse pipe covers); and
					14. Personnel safety.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.6.B	Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including ability to operate anchoring equipment under various conditions, such as anchoring, weighing anchor, securing for sea, and in emergencies	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate describes anchor chain shot markings.	 The candidate's description includes: Markings for each shot; Marking of chain to indicate number of shots the detachable link is from anchor; and Painting of the last two shots of the anchor chain.
4.6.C	Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including ability to operate anchoring equipment under various conditions, such as anchoring, weighing anchor, securing for sea, and in emergencies	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate describes emergency anchoring procedures.	 The candidate's description includes: Standing by anchors in restricted or confined waters; Letting go anchors with little headway; Letting go anchors with significant headway; Leaving the area if the anchor chain control is lost and the next to last and last shot is seen on the wildcat; and Safety procedures and equipment used to minimize risk of injury during anchoring procedures.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.7.A	Contribute to	Knowledge of the	On board ship or in a	the candidate rigs and	The candidate:
	the safe operation of	following procedures and ability to rig and unrig	laboratory,	unrigs a bosun's chair.	1. Gathers all required materials;
	deck	bosun's chairs and staging			2. Inspects the bosun's chair:
	equipment and machinery				a. The material has not been chafed;
	machinery				b. The material has not been compromised by the sun or chemicals;
					c. Strapping is undamaged; and
					d. Hardware is undamaged and unworn;
					3. Inspects the gantline to be used:
					a. The material has not been chafed; and
					b. The material has not been compromised by the sun or chemicals;
					4. Inspects that hardware is serviceable;
					5. Inspects the safety harness:
					a. The material has not been chafed;
					b. The material has not been compromised by the sun or chemicals;
					c. Strapping is undamaged; and
					d. Hardware is undamaged and unworn;
					6. Gathers personnel who will be assisting and briefs them on commands to be used and safety precautions;
					Continued on next page

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.7.A					Continued from previous page
Cont'd					7. Rigs the gantline;
					8. Rigs the bosun's chair:
					a. For a modern bosun's chair, follow the manufacturer's recommendations; or
					b. For an old style bosun's chair, use a gantline;
					 Tests the rigged bosun's chair, staging, and gantlines by sitting in and/or standing on at the lowest point of the drop and bounce in the rig;
					10. When raised so that feet clear the deck, secures themselves and performs a small task with both hands;
					11. Frees the securing and lowers themselves to the deck; and
					12. Unrigs and stows all equipment per the manufacturer's instructions.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.8.A	Contribute to	Knowledge of the	On board ship or in a	the candidate	The candidate's description includes:
	the safe	following procedures and	laboratory, when	describes the	1. Inspecting the pilot ladder:
	operation of deck	ability to rig and unrig pilot ladders, hoists, rat	asked by a Qualified Assessor,	procedures to rig and unrig pilot ladders.	a. No shackles, knots or splices;
	equipment and	guards, and gangways	13503501,	uning phot ladders.	b. Steps equally spaced and of equal width;
	machinery				c. No crooked steps;
					d. Spreaders used as step, bottom spreader is fifth step;
					e. No eyes or loops on lower end; and
					 f. Lighting, if needed, is functioning and illuminates the deck work area and pilot ladder;
					2. Rigging the pilot ladder:
					 No overboard discharges in the area where pilot will board;
					 Man-ropes are ready or paid out (as required by pilot);
					 c. Handhold stanchions or accommodation ladder are rigged;
					 Bottom rung of pilot ladder is at height; requested by pilot; and
					e. Communications are set up with bridge; and
					3. Unrig and stow pilot ladder:
					a. Pilot ladder is brought up onto deck and stowed;
					b. Accommodation ladder is brought up onto deck; and
					c. Man ropes are stowed.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.8.B	Contribute to the safe operation of deck equipment and machinery	Knowledge of the following procedures and ability to rig and unrig pilot ladders, hoists, rat guards, and gangways	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate describes how to rig and unrig rat guards.	 The candidate's description includes: 1. Inspection for condition and securing lines attached; and 2. Installing rat guards on lines and other shore connections.
4.8.C	Contribute to the safe operation of deck equipment and machinery	Knowledge of the following procedures and ability to rig and unrig pilot ladders, hoists, rat guards, and gangways	On board ship or in a laboratory,	the candidate rigs and unrigs a gangway.	 The candidate: 1. Inspects gangway for cracks, broken steps, frozen block and tackle, or missing parts; 2. Sets up gangway in preparation for use; 3. Brings gangway aboard in preparation for departure; and 4. Breaks down gangway and secures it for sea.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.9.A	Contribute to the safe operation of deck equipment and machinery	Knowledge of the following procedures and ability to use marlin spike seamanship skills, including the proper use of knots, splices, and stoppers	On board ship or in a laboratory, or in an approved "Marlinspike Seamanship" course,	the candidate demonstrates marlinspike seamanship skills including knots, splices and stoppers, and block and tackle.	 The candidate: 1. Whips eye splice OR short splice within 15 minutes; and 2. Ties knots (a) through (d) and at least six others within 15 minutes: a. Bowline; b. Square knot; c. Clove hitch; d. Sheet bend; e. Carrick bend; f. Rolling hitch; g. Stopper hitch; h. French bowline; i. Stage hitch; j. Running bowline; k. Bowline on a bight; l. Fisherman's bend; m. Timber hitch; n. Cat's paw; o. Figure eight; p. Barrel hitch; q. Round turn and two half hitches; and r. Double becket bend. NOTE: The candidate should successfully demonstrate seven of the ten knots and the whipping.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.9.A					Continued from previous page
Cont'd					3. Identifies various block and tackle rigs, rove to advantage, or not, and identify parts and their use.
					4. Demonstrates the proper methods for handling lines, wires, cables and chains;
					5. Demonstrates proper methods of securing and un- securing canvas; and
					6. Demonstrates a working knowledge of the proper techniques to serve line.
4.10.A	Contribute to the safe operation of deck equipment and machinery	Use and handling of deck and cargo-handling gear and equipment access arrangements, hatches and hatch covers, ramps, side/bow/stern doors, or elevators	On board ship, or in a laboratory,	the candidate demonstrates the use of cargo-handling gear and equipment access arrangements.	 The candidate demonstrates the use of onboard cargo handling gear and access arrangements including: Inspecting the equipment to be used to ensuring that it is in good operating condition; Performing any rigging and ensuring that all of the related equipment is readily available; Releasing the dogs or other securing arrangement; Opening the access way; Installing or set any safety equipment and other equipment normally used when the access is open; Demonstrating the use of the open access; Securing the access to its "at sea" position; Checking for water tightness as specified in the vessel's operations procedures; and Stowing all equipment.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.11.A	Contribute to	Use and handling of deck	On board ship, or in a	the candidate traces	The candidate's description includes:
	the safe operation of	and cargo-handling gear and equipment pipeline	laboratory,	out and describes a piping system	1. Purpose of the system traced;
	deck equipment and	systems – bilge and ballast suctions and wells		specified by the assessor.	2. Location of the valves to be used to normally start and shutdown the system;
	machinery				3. Location of the valves to be used in the event of an emergency shutdown of the system, including emergency shutdown devices;
					4. Manual operation of each type of valve in that system, both locally and remotely operated;
					 Manual operation of any in-tank measuring devices;
					6. Probable location of any leakage, what form that leakage may take, onboard notification procedures, and what precautions are to be followed;
					7. Any topping off procedures that are followed; and
					8. Any stripping procedures that are followed.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.12.A	Contribute to the safe operation of deck equipment and machinery	Use and handling of deck and cargo-handling gear and equipment cranes, derricks, winches	On board ship, or in a laboratory,	the candidate demonstrates proper use of deck and cargo- handling gear and equipment cranes, derricks, and winches.	 The candidate: Inspects the equipment and ensures that it is in good operating condition and suitable for the load to be lifted; Unstows the equipment to be used; performs any rigging and ensures that all required equipment is available; Lifts a load and moves it to a location designated by the assessor; Secures the equipment; and Stows all equipment.
4.13.A	Contribute to the safe operation of deck equipment and machinery	Knowledge of hoisting and dipping flags and the main single-flag signals (A, B, G, H, O, P, Q)	On board ship or in a laboratory, when given Publication 102 and shown the signal flags A, B, G, H, O, P, and Q,	the candidate identifies each flag and its meaning and describes hoisting procedures.	 The candidate: 1. Identifies the flag by: a. Letter; b. Phonetic alphabet; and c. Meaning; and 2. Describes: a. Hauling the flag hoist "close up;" b. Lowering the flag hoist "at the dip;" and c. Reason and procedure for dipping a ship's ensign.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.1.A	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety, including working aloft	On board ship or in a laboratory,	the candidate demonstrates safe working practices and personal shipboard safety when working aloft.	 The candidate: Identifies and complies with applicable regulatory and/or company standards; Follows safe working practices; Notifies other personnel as appropriate; Confirms that all equipment that may create a hazard has been turned off and tagged accordingly; Confirms that the ship's motion and weather conditions will remain within safe limits; Selects appropriate safety equipment, and inspects and confirms as that it is safe for use; Confirms that the area below has been cordoned off and placarded; and Attaches lanyards to tools (if practical).

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.2.A	Apply	Working knowledge of	On board ship or in a	the candidate	The candidate's description includes:
	occupational health and safety	safe working practices and personal shipboard safety, including working over the	laboratory, when asked by a Qualified Assessor,	describes safe working practices and personal shipboard safety when	1. Awareness of applicable company or regulatory standards;
	precautions	side	110505001,	working over the side.	2. Knowledge of safe working practices;
					3. Notifying personnel as appropriate;
					 Obtaining authorization from the appropriate vessel authority before beginning work over the side;
					 Notifying the officer in charge of the navigational watch (OICNW);
					 Confirming that all equipment that may create a hazard has been turned off and tagged accordingly;
					 Confirming that the ship's motion and weather conditions will remain within safe limits;
					 Confirming that safety equipment is used and has been checked for operational integrity and suitability for the work to be performed;
					 Confirming that lanyards are attached to tools (if practical);
					10. Confirming that safety placards in the area have been read and appropriate actions taken; and
					11. Notifying appropriate personnel in addition to the OICNW.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.3.A	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety including working in enclosed spaces	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate describes the characteristics of an enclosed space.	 The candidate's description includes that an enclosed space: 1. Has limited openings for entry and exit; 2. Has poor natural ventilation; and 3. Is not designed for continuous occupancy.
5.3.B	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety, including working in enclosed spaces	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes possible scenarios that could occur during an enclosed space and the dangers involved in an enclosed space entry.	 The candidate's description includes: Workers being overcome by fumes and lack of oxygen; Rescuers not using proper safety equipment and being overcome by the hazard; and Stand-by personnel not being trained in their duties and what they may do that would be a hazard to themselves and others while trying to effect a rescue without proper equipment (SCBA's, communications, etc).

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.3.C	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety, including working in enclosed spaces	On board ship or in a laboratory,	the candidate demonstrates procedures designed to safeguard personnel working in enclosed spaces.	 The candidate demonstrates procedures to safeguard personnel and the ship, including: 1. Assessment of risk; 2. Entry authorization procedures; 3. General precautions: 4. Hazards isolated; 5. Ventilation; 6. Interior and exterior illumination; 7. Communications; 8. Rescue and resuscitation equipment; 9. Proper dress and safety equipment; and 10. Entry crew briefed; a. Atmosphere safe for men and work to be performed; and b. Potential hazards.
5.4.A	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety, including permit to work systems	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes procedures for and spaces that require a permit to work.	 The candidate's description includes: Hot work; Confined spaces; and Other policies that require a permit to work (e.g., working aloft, over the side).

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.5.A	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety including line handling	On board ship or in a laboratory, during a berthing operation,	the candidate demonstrates the proper handling a heaving line.	 The candidate: Inspects the heaving line for damage, wear and tear, knots, and tangling before using; Untangles a heaving line that has been knotted and tangled; and
					3. Coils and heaves a heaving line during mooring operations.
5.5.B	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety, including line handling	On board ship or in a laboratory,	the candidate pulls mooring lines on deck.	 The candidate: Fakes the mooring lines so that they can run free; Coils the mooring lines so that they can run free; and Secures mooring lines on deck so that they do not run free until ready for use.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.5.C	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety including line handling	On board ship or in a laboratory, during a berthing operation,	the candidate uses a messenger line.	 The candidate: Selects the properly sized messenger for the anticipated strain; Bends the messenger onto the eye of a mooring wire or line; then moves mooring wire or line to another location using a winch with at least one change of direction; and Bends the messenger onto a straight section of wire or line; then moves mooring wire or line to another location using a winch with at least one change of direction. NOTE: The knots used are suitable for the service and size of lines involved. When heaving, ensure appropriate safety precautions are observed, including proper number of turns on the capstan, hand placement, body position in relation to the messenger under tension, and avoiding the piling up of the messenger while heaving.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.5.D	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety including line handling	On board ship moored alongside a dock, or in a laboratory,	the candidate adjusts the tension on mooring lines and wires.	 The candidate: Adjusts the tension of lines using the ship's winches; Pays out mooring wires, under load, in a controlled manner; Pays out mooring lines, on bitts, under load, in a controlled manner; Takes in slack on mooring wires without sufficient tension; and Takes in slack on mooring lines, on bitts and cleats, so that they have sufficient tension. NOTE: The above is performed with regard to personnel working in the area, weather (both present and anticipated), cargo movement, and limitations of the ship's operations. When heaving, appropriate safety precautions are observed, including proper number of turns on the capstan, hand placement, body position, and avoiding the piling up of line.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.5.E	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety including line handling	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes the safety precautions to be used when working with lines, wire rope, and chains.	 The candidate's description includes: Never stand in or reach through a bight; Be aware of the tension on nearby lines, wire rope and chain in the event that they break free or snap; Wear gloves when handling wire rope; Keep hands at least 18 inches from a bit, padeye, capstan, warping head, block, etc.; Be aware of snapback areas and avoid them; and At least two people should handle mooring lines and wires on winches: one to handle the line or wire, and one on the winch controls.
5.6.A	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety, including lifting techniques and methods of preventing back injury	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes factors that can cause or exacerbate back injury.	 The candidate's description includes: Stress; Lack of sleep/fatigue; Poor physical condition; Excessive weight; Excessive exercise; Heavy physical work; Static posture (not moving); Repetitive work (involving bending, twisting, etc.); and Slips, trips, and falls.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.6.B	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety including lifting techniques and methods of preventing back injury	On board ship, or in a laboratory,	the candidate demonstrates lifting techniques and methods of preventing back injury.	 The candidate demonstrates: Proper lifting procedures; Proper procedures to set down a load; and The use of back support or movement limiting devices.
5.6.C	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety including lifting techniques and methods of preventing back injury	On board ship, or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes the proper use of labor-saving devices found aboard ship.	 The candidate's description includes: 1. Dollies; 2. Carts; 3. Ramps; 4. Block and tackle; 5. Cranes; 6. Elevators; and 7. Davits.

Task No. C	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
occ hea saf	pply ccupational ealth and ifety recautions	Working knowledge of safe working practices and personal shipboard safety, including electrical safety	On board ship or in a laboratory,	the candidate demonstrates electrical safety procedures.	 The candidate: Observes all pertinent instructions and warning signs aboard ship; Observes all safety precautions regarding portable electric lights and tools; Does not touch or operate any device that has a tag attached; Does not go behind electrical switchboards; Does not touch bare electric wires or connections; Assumes that all circuits are live; Does not use electric cable runs to hoist or support any weight; Does not use the wire ways for storage; Does not permit water to get into electrical equipment; Is aware that electrolyte from a storage battery can cause severe burns and can damage equipment, has an electricial disconnect the circuit and tag it as out of commission; Does not start or operate electrical equipment when flammable vapors are present; and

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.8.A	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety, including mechanical safety	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes the hazards of shipboard equipment and the reasons for guards and safety features.	 The candidate's description includes: 1. Hazards that exist; 2. Whether safety guards or devices be removed or not used; 3. Procedures to minimize the hazards, including; a. Portable tools; b. Hand tools; c. Machinery; d. Galley equipment; e. Low clearance areas; f. Cargo securing gear; g. Line handling; h. Unsecured material; i. High noise areas; j. High heat or cold areas (burn or freezing hazards); and k. Visibility hazards
5.9.A	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety, including chemical and biohazard safety	On board ship or in a laboratory, during the simulation of a chemical or biohazard spill or incident,	the candidate simulates the proper response in accordance with Safety Data Sheet (SDS).	 The candidate: Reports the spill; Refers to the SDS or is informed accordingly by a supervisor with access to an SDS; Isolates the chemical or bio-hazardous material; and Monitors the spill until relieved by an emergency team.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.10.A	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety. including personal safety equipment	On board ship or in a laboratory,	the candidate uses personal safety equipment.	 The candidate demonstrates and describes the purpose and intended use of the following personal safety equipment: 1. Gloves; 2. Goggles; 3. Respirators; 4. Aprons; 5. Face shields; 6. Steel-toed shoes; 7. Hearing protection; 8. Clothing;
					9. Safety harness; and10. Head protection.
5.10.B	Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety including personal safety equipment	On board ship or in a laboratory,	the candidate demonstrates the proper use of a safety harness.	 The candidate: Inspects the safety harness, line and hardware; Inspects the point and area the safety harness hardware will be attached; Rigs the safety harness, line, and hardware; and Briefs the safety harness line handler about his/her duties (if one is assigned).

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
6.1.A	Apply precautions and contribute to the prevention of pollution of the marine environment	Knowledge of the precautions to be taken to prevent pollution of the marine environment	On board ship or in a laboratory, when questioned by a Qualified Assessor;	the candidate describes the sources of operational pollution.	 The candidate's description includes: Oil; Noxious liquid substances; Packaged goods and non-liquid substances; Sewage; Garbage; and Air pollution.
6.1.B	Apply precautions and contribute to the prevention of pollution of the marine environment	Knowledge of the precautions to be taken to prevent pollution of the marine environment	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes the precautions to be taken to prevent pollution of the marine environment.	 The candidate's description includes: Collection, sorting by type, storage of garbage on board; Deck preparations for preventing or controlling pollutants due to the transfer of cargo, fuel, or passengers; Transferring garbage ashore for disposal; and Making rounds of areas that are under the responsibility of the deck department for pollution prevention and control.
6.2.A	Apply precautions and contribute to the prevention of pollution of the marine environment	Knowledge of the use and operation of anti-pollution equipment	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate describes the use of shipboard anti- pollution equipment.	 The candidate's description includes the location of: Spill response kits including spill mitigation equipment and types of spills that the equipment is effective on; and Fittings and materials such as plugs, caps, flanges, and other equipment that can be used to stop leaks in the cargo, ballast, bunker, etc., systems.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
6.3.A	Apply precautions and contribute to the prevention of pollution of the marine environment	Knowledge of the approved methods for disposal of marine pollutants	On board ship or in a laboratory, when questioned by a Qualified Assessor,	the candidate lists the expected types of waste that could be generated aboard the vessel and describes the proper manner of collection and storage so that the pollution potential of that waste is minimized.	 The candidate's description includes: Contaminated rags; Contaminated booms; Garbage; Damaged drums; Contaminated sorbents; and Other contaminated material specific to the type of vessel the assessment is performed on.
7.1.A Course	Operate survival craft and rescue boats	Knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment Knowledge of survival at sea techniques	Survival Craft or Profici	iency in Survival Craft-Li	alifies for an STCW endorsement for Proficiency in mited or by the successful completion of an approved ciency in Survival Craft-Limited course.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
8.1.A	Contribute to shipboard maintenance and repair	Knowledge of surface preparation techniques	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate prepares a surface for paint, caulk, or sealant	 The candidate: Evaluates the surface to be prepared:

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
8.2.A	Contribute to shipboard maintenance and repair	Ability to use painting, lubrication and cleaning materials and equipment	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate prepares and paints a surface.	 The candidate: Applies the proper primer (if required); Applies the coating; Uses the proper tool for spreading the coating onto the prepared surface (e.g., brush, roller, sprayer); Blocks off of the area to be coated and secures ship's equipment that may be affected; Mixes the primer and coating as required (in accordance with manufacturer's instructions); Uses appropriate protective equipment; and Marks off the coated area so that it is not disturbed until ready for use.
8.3.A	Contribute to shipboard maintenance and repair	Ability to understand and execute routine maintenance and repair procedures	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate demonstrates the lubrication of shipboard equipment.	 The candidate properly lubricates the following: Roller chocks/fairleads so they turn freely; Gangways and associated tackle; Safety equipment (in accordance with manufacturer's and company's recommendations); Cargo equipment (in accordance with manufacturer's and company's recommendations); and Other ship's equipment, as needed.
8.3.B	Contribute to shipboard maintenance and repair.	Ability to understand and execute routine maintenance and repair procedures	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate demonstrates inspection of shipboard equipment.	The candidate inspects for proper operation of the following:1. Watertight doors;2. Winches;3. Cranes; and4. Valves.

Task No.	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
8.4.A	Contribute to shipboard maintenance and repair.	Understanding manufacturer's safety guidelines and shipboard instructions	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate demonstrates tag out/lock out procedures.	The candidate demonstrates tag out/lock out procedures.
8.4.B	Contribute to shipboard maintenance and repair.	Understanding manufacturer's safety guidelines and shipboard instructions	On board ship or in a laboratory, when asked by a Qualified Assessor to locate manufacturer's safety guidelines and/or shipboard instructions,	the candidate locates the guidelines and instructions specified by the assessor.	The candidate locates the correct manuals and/or instructions.
8.5.A	Contribute to shipboard maintenance and repair.	Knowledge of safe disposal of waste materials	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate safely disposes of shipboard waste materials.	 The candidate demonstrates the proper disposal of waste materials from: 1. Surface preparations; 2. Coating surfaces; 3. Lubricating; 4. Hand and power tool maintenance; and 5. Placing equipment in service (i.e., packaging).
8.6.A	Contribute to shipboard maintenance and repair.	Knowledge of the application, maintenance and use of hand and power tools	On board ship or in a laboratory, when asked by a Qualified Assessor,	the candidate demonstrates the use and maintenance of hand and power tools.	 The candidate demonstrates proper maintenance and use of: 1. Wrenches; 2. Screwdrivers; 3. Air-powered or electrical hand grinders; 4. Files; and 5. Knives.

Record of Assessment

for

Able Seafarer – Deck

For:

Print Name of Candidate

Candidate's Signature

Candidate's Mariner Reference No.

Able Seafarer – Deck

<u>NOTE TO QUALIFIED ASSESSOR(S)</u>: In performing your function as a qualified assessor, you may use your initials only to indicate that you have personally witnessed the demonstration of skill or ability by the person being assessed. The Assessment Guidelines in Enclosure (2) will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/5 of the STCW Code. The use of these Assessment Guidelines is not mandatory and an alternative means of having achieved the standards of competence in the STCW Code will be considered as described in paragraph 10 of this NVIC. In accordance with 46 CFR 12.601(b), alternative Assessment Guidelines must be submitted to the National Maritime Center and approved before use.

STCW Competence	Knowledge, Understanding, and Proficiency	Task No.	Task Name	Assessor's Initials	Date
Contribute to a safe navigational watch	Ability to understand orders and to communicate with the officer of the watch in matters relevant to watch keeping duties	1.1.A <i>RFPNW</i>	Understand orders	RFPNV	V
	Procedures for the relief, maintenance and handover of a watch	1.2.A <i>RFPNW</i>	Watch relief	RFPNV	v
	Information required to 1.3.A maintain a safe watch RFPNW Watchkeeping		RFPNV	V	
Contribute to berthing, anchoring and other mooring operations	te to berthing, g and other Working knowledge of the mooring system and related 2.1.A Describe functions of mooring and tug lines				
	function of mooring and tug lines	2.1.B	Describe characteristics of mooring equipment		

Notes:

RFPNW The assessments are met by holding or qualifying for an STCW endorsement as Rating Forming Part of a Navigational Watch (RFPNW).

COURSE The assessment are satisfied by successful completion of a Coast Guard approved or accepted course.

Able Seafarer – Deck

STCW Competence	Knowledge, Understanding, and Proficiency	Task No.	Task Name	Assessor's Initials	Date
Contribute to berthing, anchoring and other mooring operations	Working knowledge of the mooring system and related procedures, including the	2.2.A	Describe characteristics of various lines		
	capacities, safe working loads, and breaking strengths of	2.2.B	Describe anchoring operations		
	mooring equipment	2.2.C	Describe characteristics and function of deck fittings		
		2.2.D Describe characteristics and funct handling equipment	Describe characteristics and function of line handling equipment		
	Working knowledge of the mooring system and related procedures, including the procedures and order of events for making fast and letting go mooring and tug lines and wires, including towing lines	2.3.A	Describe berthing operations		
		2.3.B	Describe unberthing operations		
	Working knowledge of the mooring system and related procedures, including the procedures and order of events for the use of anchors in various operations	2.4.A	Demonstrate anchoring procedures		
	Working knowledge of the procedures and order of events associated with mooring to a buoy or buoys	2.5.A	Describe procedures for mooring to a buoy		

Able Seafarer – Deck

STCW Competence	Knowledge, Understanding, and Proficiency	Task No.	Task Name	Assessor's Initials	Date
Contribute to the handling of cargo and stores	Knowledge of procedures for safe handling, stowage and securing of cargoes and stores, including dangerous, hazardous and harmful substances and liquids	3.1.A	Handling, stowage and securing of cargoes and stores		
	Basic knowledge of and precautions to observe in connection with particular types of cargo and identification of IMDG labeling	3.2.A	Describe IMDG labels, marks, and signs		
Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including function and uses of valves and pumps, hoists, cranes, booms, and related equipment	4.1.A	Describe operation of valves and pumps, hoists, cranes, booms, and related equipment		
	Knowledge of deck equipment, including function and uses of winches, windlasses, capstans and related equipment	4.2.A	Describe operation of winches, windlasses, capstans and related equipment		
	Knowledge of deck equipment, including hatches, watertight doors, ports, and related equipment	4.3.A	Demonstrate operation of deck equipment, including hatches, watertight doors, ports, and related equipment		

Print Name of Candidate

Able Seafarer – Deck

STCW Competence	Knowledge, Understanding, and Proficiency	Task No.	Task Name	Assessor's Initials	Date
Contribute to the safe operation of deck	Knowledge of deck equipment, including fiber and wire ropes,	4.4.A	Describe use and maintenance fiber lines		
equipment and machinery	cables and chains, including their construction, use,	4.4.B	Describe use and maintenance of synthetic lines		
	markings, maintenance and proper stowage	4.4.C	Describe use and maintenance of wire rope		
		4.4.D	Describe use and maintenance of chain		
	Knowledge of deck equipment, including ability to use and understand basic signals for the operation of equipment, including winches, windlasses, cranes, and hoists	4.5.A	Demonstrate basic signals for operation of equipment, including winches, windlasses, cranes, and hoists		
	Knowledge of deck equipment, including ability to operate		Demonstrate use of anchoring equipment		
	anchoring equipment under various conditions, such as anchoring, weighing anchor, securing for sea, and in emergencies	4.6.B	Describe anchor chain markings		
		4.6.C	Describe emergency anchoring procedures		
	Knowledge of the following procedures and ability to rig and unrig bosun's chairs and staging	4.7.A	Demonstrate rigging and unrigging a bosun's chair		
	Knowledge of the following procedures and ability to rig	4.8.A	Describe rigging and unrigging pilot ladder		
	and unrig pilot ladders, hoists, rat guards and gangways	4.8.B	Describe rigging and unrigging rat guards		
		4.8.C	Demonstrate rigging and unrigging a gangway		

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Print Name of Candidate

Able Seafarer – Deck

STCW Competence	Knowledge, Understanding, and Proficiency	Task No.	Task Name	Assessor's Initials	Date
Contribute to the safe operation of deck equipment and machinery	Knowledge of the following procedures and ability to use marlin spike seamanship skills, including the proper use of knots, splices and stoppers	4.9.A	Demonstrate marlinspike seamanship		
	Use and handling of deck and cargo-handling gear and equipment access arrangements, hatches and hatch covers, ramps, side/bow/stern doors or elevators	4.10.A	4.10.A Demonstrate use of cargo-handling gear and equipment access arrangements		
	Use and handling of deck and cargo-handling gear and		Trace out and describe a piping system		
	Use and handling of deck and cargo-handling gear and equipment cranes, derricks, winches	4.12.A	Demonstrate use of cargo and equipment handling gear		
	Knowledge of hoisting and dipping flags and the main single-flag signals. (A, B, G, H, O, P, Q)	4.13.A	Identify single letter flags and describe hoisting procedures		
Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety, including working aloft	5.1.A	1.A Demonstrate working aloft		

Able Seafarer – Deck

STCW Competence	Knowledge, Understanding, and Proficiency	Task No.	Task Name	Assessor's Initials	Date
Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety, including working over the side	5.2.A	Describe procedures for working over the side		
	Working knowledge of safe working practices and	5.3.A	Describe characteristics of an enclosed space		
	personal shipboard safety including working in enclosed	5.3.B	Describe risks of enclosed spaces and safety procedures		
	spaces	5.3.C	Demonstrate enclosed space safety procedures		
	Working knowledge of safe working practices and personal shipboard safety, including permit to work systems	5.4.A	Describe procedures for work permits		
	Working knowledge of safe working practices and	5.5.A	Demonstrate use of a heaving line		
	personal shipboard safety including line handling	5.5.B	Demonstrate pulling mooring lines		
		5.5.C	Demonstrate use of a messenger line		
		5.5.D	Adjust tension on mooring lines		
		5.5.E	Describe line handling safety		
	Working knowledge of safe working practices and	5.6.A	Describe causes of back injury		
	personal shipboard safety, including lifting techniques and methods of preventing back	5.6.B	Demonstrate lifting techniques to avoid back injury		
	injury	5.6.C	Describe use of labor saving devices		

Print Name of Candidate

Able Seafarer – Deck

STCW Competence	Knowledge, Understanding, and Proficiency	Task No.	Task Name	Assessor's Initials	Date
Apply occupational health and safety precautions			Demonstrate electrical safety procedures		
	Working knowledge of safe working practices and personal shipboard safety, including mechanical safety	5.8.A	Describe mechanical equipment safety procedures		
	Working knowledge of safe working practices and personal shipboard safety, including chemical and biohazard safety	5.9.A	5.9.A Simulate response to hazardous material spill		
	Working knowledge of safe working practices and		Demonstrate use of PPE		
	personal shipboard safety, including personal safety equipment	5.10.B	Demonstrate use of a safety harness		
Apply precautions and contribute to the prevention			Describe sources of operational pollution		
of pollution of the marine environment	of the marine environment	6.1.B	Describe pollution prevention procedures		
	Knowledge of the use and operation of anti-pollution equipment	6.2.A	Describe use of anti-pollution equipment		
	Knowledge of the approved methods for disposal of marine pollutants	6.3.A	Describe collection and storage of shipboard waste		

Able Seafarer – Deck

STCW Competence	Knowledge, Understanding, and Proficiency	Task No.	Task Name	Assessor's Initials	Date
Operate survival craft and rescue boats	Knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment	7.1.A	Operation of survival craft and rescue boats	rescue boats COURSE	
	Knowledge of survival at sea techniques				
Contribute to shipboard maintenance and repair	Knowledge of surface preparation techniques	8.1.A	Demonstrate surface preparation techniques		
	Ability to use painting, Iubrication and cleaning 8.2.A Demonstrate painting techniques materials and equipment		Demonstrate painting techniques		
	Ability to understand and execute routine maintenance	8.3.A	Demonstrate lubrication of shipboard equipment		
	and repair procedures	8.3.B	Demonstrate inspection of shipboard equipment		
	Understanding manufacturer's safety guidelines and shipboard instructions	8.4.A	Demonstrate tag out/lock out procedures		
	Understanding manufacturer's safety guidelines and shipboard instructions	8.4.B Locate safety guidelines and shipboard instructions			
	Knowledge of safe disposal of waste materials	8.5.A	Demonstrate disposal of waste materials		
Knowledge of the application, maintenance and use of hand and power tools8.6.ADemonstrate use and and power tools		Demonstrate use and maintenance of hand and power tools			

Able Seafarer – Deck

ASSESSOR AND VESSEL INFORMATION

Qualified Assessors witnessing the successful demonstrations noted in this record should provide the information below relative to their service with the candidate, including their Mariner Reference Number.

	Gross	Dates o	f Service				Assessor	Assessor
Vessel Name	Tonnage (GRT or GT)	From	То	Assessor Name	Assessor Signature	Initials of Assessor	Mariner Ref. No.	Shipboard Position
M/V Onderbroek	8,892 GRT	7/7/2014	11/14/2014	Alfred Wunsiedel	Alfred Wunsiedel	<i>AU</i>	1234567	Master

Able Seafarer – Deck

Gross	Dates of	f Service				Assessor	Assessor
Tonnage (GRT or GT)	From	То	Assessor Name	Assessor Signature	Initials of Assessor	Mariner Ref. No.	Shipboard Position
	Gross Tonnage (GRT or GT)	Tonnage	Dates of Service Tonnage (GRT or GT) From To Image: Image of the service of	GIUSS	GI055		

Print Name of Candidate

Excerpts from the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended

and

Seafarers' Training, Certification and Watchkeeping Code, as amended

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

The Manila Amendments to the annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978

Chapter I

General provisions

Regulation I/6

Training and assessment

Each Party shall ensure that:

- .1 the training and assessment of seafarers, as required under the Convention, are administered, supervised and monitored in accordance with the provisions of section A-I/6 of the STCW Code; and
- .2 those responsible for the training and assessment of competence of seafarers, as required under the Convention, are appropriately qualified in accordance with the provisions of section A-I/6 of the STCW Code for the type and level of training and assessment involved.

Regulation I/12

Use of simulators

1 The performance standards and other provisions set forth in section A-I/12 and such other requirements as are prescribed in part A of the STCW Code for any certificate concerned shall be complied with in respect of:

- .1 all mandatory simulator-based training;
- .2 any assessment of competency required by part A of the STCW Code which is carried out by means of a simulator; and
- **.3** any demonstration, by means of a simulator, of continued proficiency required by part A of the STCW Code.

Chapter II

Master and deck department

Regulation II/5

Mandatory minimum requirements for certification of ratings as able seafarer deck

1 Every able seafarer deck serving on a seagoing ship of 500 gross tonnage or more shall be duly certificated.

- 2 Every candidate for certification shall:
 - .1 be not less than 18 years of age;
 - .2 meet the requirements for certification as a rating forming part of a navigational watch;
 - .3 while qualified to serve as a rating forming part of a navigational watch, have approved seagoing service in the deck department of:

- **.3.1** not less than 18 months, or
- .3.2 not less than 12 months and have completed approved training; and
- .4 meet the standard of competence specified in section A-II/5 of the STCW Code.

3 Every Party shall compare the standards of competence which it required of Able Seamen for certificates issued before 1 January 2012 with those specified for the certificate in section A-II/5 of the STCW Code, and shall determine the need, if any, for requiring these personnel to update their qualifications.

4 Until 1 January 2012, a Party which is also a Party to the International Labour Organization Certification of Able Seamen Convention, 1946 (No. 74) may continue to issue, recognize and endorse certificates in accordance with the provisions of the aforesaid convention.

5 Until 1 January 2017, a Party which is also a Party to the International Labour Organization Certification of Able Seamen Convention, 1946 (No. 74) may continue to renew and revalidate certificates and endorsements in accordance with the provisions of the aforesaid convention.

6 Seafarers may be considered by the Party to have met the requirements of this regulation if they have served in a relevant capacity in the deck department for a period of not less than 12 months within the last 60 months preceding the entry into force of this regulation for that Party.

The Manila Amendments to the Seafarers' Training, Certification and Watchkeeping (STCW) Code

Chapter I

Standards regarding general provisions

Section A-I/6

Training and assessment

1 Each Party shall ensure that all training and assessment of seafarers for certification under the Convention is:

- .1 structured in accordance with written programmes, including such methods and media of delivery, procedures, and course material as are necessary to achieve the prescribed standard of competence; and
- .2 conducted, monitored, evaluated and supported by persons qualified in accordance with paragraphs 4, 5 and 6.

2 Persons conducting in-service training or assessment on board ship shall only do so when such training or assessment will not adversely affect the normal operation of the ship and they can dedicate their time and attention to training or assessment.

Qualifications of instructors, supervisors and assessors^{*}

3 Each Party shall ensure that instructors, supervisors and assessors are appropriately qualified for the particular types and levels of training or assessment of competence of seafarers either on board or ashore, as required under the Convention, in accordance with the provisions of this section.

In-service training

4 Any person conducting in-service training of a seafarer, either on board or ashore, which is intended to be used in qualifying for certification under the Convention, shall:

- .1 have an appreciation of the training programme and an understanding of the specific training objectives for the particular type of training being conducted;
- .2 be qualified in the task for which training is being conducted; and
- .3 if conducting training using a simulator:
 - **.3.1** have received appropriate guidance in instructional techniques involving the use of simulators; and

^{*} The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

.3.2 have gained practical operational experience on the particular type of simulator being used.

5 Any person responsible for the supervision of in-service training of a seafarer intended to be used in qualifying for certification under the Convention shall have a full understanding of the training programme and the specific objectives for each type of training being conducted.

Assessment of competence

6 Any person conducting in-service assessment of competence of a seafarer, either on board or ashore, which is intended to be used in qualifying for certification under the Convention, shall:

- .1 have an appropriate level of knowledge and understanding of the competence to be assessed;
- .2 be qualified in the task for which the assessment is being made;
- .3 have received appropriate guidance in assessment methods and practice;
- .4 have gained practical assessment experience; and
- .5 if conducting assessment involving the use of simulators, have gained practical assessment experience on the particular type of simulator under the supervision and to the satisfaction of an experienced assessor.

Training and assessment within an institution

7 Each Party which recognizes a course of training, a training institution, or a qualification granted by a training institution, as part of its requirements for the issue of a certificate required under the Convention, shall ensure that the qualifications and experience of instructors and assessors are covered in the application of the quality standard provisions of section A-I/8. Such qualification, experience and application of quality standards shall incorporate appropriate training in instructional techniques, and training and assessment methods and practice, and shall comply with all applicable requirements of paragraphs 4 to 6.

Section A-I/12

Standards governing the use of simulators

Part 1 – Performance standards

General performance standards for simulators used in training

- 1 Each Party shall ensure that any simulator used for mandatory simulator-based training shall:
 - .1 be suitable for the selected objectives and training tasks;

- .2 be capable of simulating the operating capabilities of shipboard equipment concerned, to a level of physical realism appropriate to training objectives, and include the capabilities, limitations and possible errors of such equipment;
- .3 have sufficient behavioural realism to allow a trainee to acquire the skills appropriate to the training objectives;
- .4 provide a controlled operating environment, capable of producing a variety of conditions, which may include emergency, hazardous or unusual situations relevant to the training objectives;
- .5 provide an interface through which a trainee can interact with the equipment, the simulated environment and, as appropriate, the instructor; and
- .6 permit an instructor to control, monitor and record exercises for the effective debriefing of trainees.

General performance standards for simulators used in assessment of competence

2 Each Party shall ensure that any simulator used for the assessment of competence required under the Convention or for any demonstration of continued proficiency so required shall:

- .1 be capable of satisfying the specified assessment objectives;
- .2 be capable of simulating the operational capabilities of the shipboard equipment concerned to a level of physical realism appropriate to the assessment objectives, and include the capabilities, limitations and possible errors of such equipment;
- .3 have sufficient behavioural realism to allow a candidate to exhibit the skills appropriate to the assessment objectives;
- .4 provide an interface through which a candidate can interact with the equipment and simulated environment;
- .5 provide a controlled operating environment, capable of producing a variety of conditions, which may include emergency, hazardous or unusual situations relevant to assessment objectives; and
- .6 permit an assessor to control, monitor and record exercises for the effective assessment of the performance of candidates.

* * * * *

Part 2 – Other provisions

Simulator training objectives

6 Each Party shall ensure that the aims and objectives of simulator-based training are defined within an overall training programme and that specific training objectives and tasks are selected so as to relate as closely as possible to shipboard tasks and practices.

Training procedures

- 7 In conducting mandatory simulator-based training, instructors shall ensure that:
 - .1 trainees are adequately briefed beforehand on the exercise objectives and tasks and are given sufficient planning time before the exercise starts;
 - .2 trainees have adequate familiarization time on the simulator and with its equipment before any training or assessment exercise commences;
 - .3 guidance given and exercise stimuli are appropriate to the selected exercise objectives and tasks and to the level of trainee experience;
 - .4 exercises are effectively monitored, supported as appropriate by audio and visual observation of trainee activity and pre- and post-exercise evaluation reports;
 - .5 trainees are effectively debriefed to ensure that training objectives have been met and that operational skills demonstrated are of an acceptable standard;
 - .6 the use of peer assessment during debriefing is encouraged; and
 - .7 simulator exercises are designed and tested so as to ensure their suitability for the specified training objectives.

Assessment procedures

8 Where simulators are used to assess the ability of candidates to demonstrate levels of competency, assessors shall ensure that:

- .1 performance criteria are identified clearly and explicitly and are valid and available to the candidates;
- .2 assessment criteria are established clearly and are explicit to ensure reliability and uniformity of assessment and to optimize objective measurement and evaluation, so that subjective judgements are kept to the minimum;
- .3 candidates are briefed clearly on the tasks and/or skills to be assessed and on the tasks and performance criteria by which their competency will be determined;

- .4 assessment of performance takes into account normal operating procedures and any behavioural interaction with other candidates on the simulator or with simulator staff;
- .5 scoring or grading methods to assess performance are used with caution until they have been validated; and
- .6 the prime criterion is that a candidate demonstrates the ability to carry out a task safely and effectively to the satisfaction of the assessor.

Qualifications of instructors and assessors^{*}

9 Each Party shall ensure that instructors and assessors are appropriately qualified and experienced for the particular types and levels of training and corresponding assessment of competence as specified in regulation I/6 and section A-I/6.

^{*} The relevant IMO Model Course(s) and resolution MSC.64(67), *Recommendations on new and amended performance standards*, may be of assistance in the preparation of courses.

Chapter II

Standards regarding the master and deck department

Section A-II/5

Mandatory minimum requirements for certification of ratings as able seafarer deck

Standard of competence

1 Every able seafarer deck serving on a seagoing ship of 500 gross tonnage or more shall be required to demonstrate the competence to perform the functions at the support level, as specified in column 1 of table A-II/5.

2 The minimum knowledge, understanding and proficiency required of an able seafarer deck serving on a seagoing ship of 500 gross tonnage or more is listed in column 2 of table A-II/5.

3 Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence specified in columns 3 and 4 of table A-II/5.

Table A-II/5

Specification of minimum standards of competence of ratings as able seafarer deck

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to a safe navigational watch	Ability to understand orders and to communicate with the officer of the watch on matters relevant to watchkeeping duties Procedures for the relief, maintenance and handover of a watch Information required to maintain a safe watch	Assessment of evidence obtained from in-service experience or practical test	Communications are clear and concise Maintenance, handover and relief of the watch is in conformity with acceptable practices and procedures
Contribute to berthing, anchoring and other mooring operations	 Working knowledge of the mooring system and related procedures, including: .1 the function of mooring and tug lines and how each line functions as part of an overall system .2 the capacities, safe working loads, and breaking strengths of mooring equipment, including mooring wires, synthetic and fibre lines, winches, anchor windlasses, capstans, bitts, chocks and bollards .3 the procedures and order of events for making fast and letting go mooring and tug lines and wires, including towing lines .4 the procedures and order of events for the use of anchors in various operations 	Assessment of evidence obtained from one or more of the following: .1 approved in-service experience .2 practical training .3 examination .4 approved training ship experience .5 approved simulator training, where appropriate	Operations are carried out in accordance with established safety practices and equipment operating instructions

Function: Navigation at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
	Working knowledge of the procedures and order of events associated with mooring to a buoy or buoys		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the handling of cargo and stores	Knowledge of procedures for safe handling, stowage and securing of cargoes and stores, including dangerous, hazardous and harmful substances and liquids Basic knowledge of and precautions to observe in	Assessment of evidence obtained from one or more of the following: .1 approved in-service experience .2 practical training	Cargo and stores operations are carried out in accordance with established safety procedures and equipment operating instructions The handling of dangerous, hazardous and harmful
	connection with particular types of cargo and identification of IMDG labelling	 .3 examination .4 approved training ship experience .5 approved simulator training, where appropriate 	cargoes or stores complies with established safety practices

Function: Cargo handling and stowage at the support level

Function: Controlling the operation of the ship and care for persons on board at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the safe operation of deck equipment and machinery	 Knowledge of deck equipment, including: .1 function and uses of valves and pumps, hoists, cranes, booms, and related equipment .2 function and uses of winches, windlasses, capstans and related equipment .3 hatches, watertight doors, ports, and related equipment 	 Assessment of evidence obtained from one or more of the following: .1 approved in-service experience .2 practical training .3 examination .4 approved training ship experience 	Operations are carried out in accordance with established safety practices and equipment operating instructions

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the safe operation of deck equipment and machinery (<i>continued</i>)	.4 fibre and wire ropes, cables and chains, including their construction, use, markings, maintenance and proper stowage		
	.5 ability to use and understand basic signals for the operation of equipment, including winches, windlasses, cranes, and hoists	Assessment of evidence obtained from practical demonstration	Communications within the operator's area of responsibility are consistently successful
	.6 ability to operate anchoring equipment under various conditions, such as anchoring, weighing anchor, securing for sea, and in emergencies	Assessment of evidence obtained from practical demonstration	Equipment operation is safely carried out in accordance with established procedures
	Knowledge of the following procedures and ability to:		
	.1 rig and unrig bosun's chairs and staging	Assessment of evidence obtained from practical	Demonstrate the proper methods for rigging and
	.2 rig and unrig pilot ladders, hoists, rat-guards and gangways	safe industry	unrigging in accordance with safe industry practice
	.3 use marlin spike seamanship skills, including the proper use of knots, splices and stoppers		Demonstrate the proper creation and use of knots, splices, stoppers, whippings, servings as well as proper canvas handling
	Use and handling of deck and cargo-handling gear and equipment:		
	.1 access arrangements, hatches and hatch covers, ramps, side/bow/stern doors or elevators		
	.2 pipeline systems – bilge and ballast suctions and wells		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the safe operation of deck equipment and machinery (<i>continued</i>)	.3 cranes, derricks, winches Knowledge of hoisting and dipping flags and the main single-flag signals. (A, B, G, H, O, P, Q)	Assessment of avidance	Demonstrate the proper use of blocks and tackle Demonstrate the proper methods for handling lines, wires, cables and chains
Apply occupational health and safety precautions	 Working knowledge of safe working practices and personal shipboard safety including: .1 working aloft .2 working over the side .3 working in enclosed spaces .4 permit to work systems .5 line handling .6 lifting techniques and methods of preventing back injury .7 electrical safety .8 mechanical safety .9 chemical and biohazard safety .10 personal safety equipment 	Assessment of evidence obtained from one or more of the following: .1 approved in-service experience .2 practical training .3 examination .4 approved training ship experience	Procedures designed to safeguard personnel and the ship are observed at all times Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Apply precautions and contribute to the prevention of pollution of the marine environment	Knowledge of the precautions to be taken to prevent pollution of the marine environment Knowledge of the use and operation of anti-pollution equipment Knowledge of the approved methods for disposal of marine pollutants	 Assessment of evidence obtained from one or more of the following: .1 approved in-service experience .2 practical training .3 examination .4 approved training ship experience 	Procedures designed to safeguard the marine environment are observed at all times
Operate survival craft and rescue boats	Knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment Knowledge of survival at sea techniques	Assessment of evidence obtained from approved training and experience as set out in section A- VI/2, paragraphs 1 to 4	Actions in responding to abandon ship and survival situations are appropriate to the prevailing circumstances and conditions and comply with accepted safety practices and standards

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to shipboard maintenance and repair	Ability to use painting, lubrication and cleaning materials and equipment Ability to understand and execute routine maintenance and repair procedures Knowledge of surface preparation techniques	Assessment of evidence obtained from practical demonstration	Maintenance and repair activities are carried out in accordance with technical, safety and procedural specifications
	Understanding manufacturer's safety guidelines and shipboard instructions	Assessment of evidence obtained from one or more of the following: .1 approved in-service	
	Knowledge of safe disposal of waste materials	experience	
	Knowledge of the	.2 practical training	
	application, maintenance and use of hand and power tools	.3 examination	
		.4 approved training ship experience	

Function: Maintenance and repair at the support level

GUIDANCE REGARDING PROVISIONS OF THE ANNEX TO THE STCW CONVENTION PART B

Chapter I

Guidance regarding general provisions

Section B-I/6

Guidance regarding training and assessment

Qualifications of instructors and assessors

1 Each Party should ensure that instructors and assessors are appropriately qualified and experienced for the particular types and levels of training or assessment of competence of seafarers, as required under the Convention, in accordance with the guidelines in this section.

In-service training and assessment

2 Any person, on board or ashore, conducting in-service training of a seafarer intended to be used in qualifying for certification under the Convention should have received appropriate guidance in instructional techniques^{*}.

3 Any person responsible for the supervision of in-service training of a seafarer intended to be used in qualifying for certification under the Convention should have appropriate knowledge of instructional techniques and of training methods and practice.

4 Any person, on board or ashore, conducting an in-service assessment of the competence of a seafarer intended to be used in qualifying for certification under the Convention should have:

- .1 received appropriate guidance in assessment methods and practice^{*}; and
- .2 gained practical assessment experience under the supervision and to the satisfaction of an experienced assessor.

5 Any person responsible for the supervision of the in-service assessment of competence of a seafarer intended to be used in qualifying for certification under the Convention should have a full understanding of the assessment system, assessment methods and practice^{*}.

* * * * *

Chapter II

Guidance regarding the master and the deck department

Section B-II/5

Guidance regarding the certification of ratings as able seafarer deck

Onboard training should be documented in an approved training record book.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.