Assessment Guidelines for Officer in Charge of a Navigational Watch on Vessels of 500 GT or More

Standard of Competence

As specified in 46 CFR 11.309(a)(3), every candidate for an endorsement as Officer in Charge of a Navigational Watch (OICNW) on vessels of 500 GT or more must provide evidence of having achieved the required standard of competence specified in Table A-II/1of the STCW Code. The table below is adopted from Table A-II/1 of the STCW Code (found in Enclosure (5)) to assist the candidate and assessor in the demonstration of competency.

Practical Skill Demonstrations

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

Qualified Assessors

A shipboard Qualified Assessor 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 qualified assessor 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 holding an appropriate national endorsement and have at least 1 year of experience as OICNW on vessels of at least 500 GRT and/or 200 GT. After December 31, 2016, QAs must be approved by the National Maritime Center (46 CFR 10.405).

Notes

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

Note 1 Not required for an endorsement that will be limited to near coastal waters.

ARPA Not required for mariners serving exclusively on vessels not fitted with an Automatic Radar Plotting Aid (ARPA); a limitation will be added to the OICNW endorsement indicating that it is not valid on vessels equipped with ARPA.

ECDIS Not required for mariners serving exclusively on vessels not fitted with an Electronic Chart Display Information System (ECDIS); a limitation will be added to the endorsement indicating that it is not valid on vessels equipped with ECDIS after December 31, 2016.

Course The assessment is satisfied by successful completion of a Coast Guard approved or accepted course specified in 46 CFR 11.309(a)(4).

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before their use.

Assessment Guidelines for Officer in Charge of a Navigational Watch on Vessels of 500 GT or More

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.1.A Adjust a sextant *Note 1*	Plan and conduct a passage and determine position	*Celestial navigation* Ability to use celestial bodies to determine the ship's position	Given a standard marine sextant with the capability for a perpendicularity error, side error, parallelism error, and collimation error,	the candidate detects and corrects adjustable sextant errors in accordance with industry standards.	1. The candidate removes the adjustable sextant errors in the following order: a. Perpendicularity; b. Side error; c. Parallelism; and d. Collimation error. 2. The candidate's remaining index error is less than 0.5 minutes of arc as determined by the assessor.
1.1.B Measure the altitude of the sun *Note 1*	Plan and conduct a passage and determine position	*Celestial navigation* Ability to use celestial bodies to determine the ship's position	Aboard a ship or on shore, given a standard marine sextant, a clear or simulated horizon, a visible sun, and an accurate time,	the candidate measures the altitude of the lower limb of the sun and accurately records the time of the observation.	The candidate's: 1. Altitude is within ±0.5 minutes of arc, after correction for index error, compared with the assessor's solution; and 2. Time is within ± 2 seconds of the assessor's solution.
1.1.C Measure the altitude of at least 3 stars *Note 1*	Plan and conduct a passage and determine position	*Celestial navigation* Ability to use celestial bodies to determine the ship's position	Aboard a ship or on shore, given a standard marine sextant, a clear or simulated horizon, a clear or partly cloudy sky, and an accurate time, during a single twilight,	the candidate measures the altitude of three stars and accurately records the time of the observation of each star.	The candidate's: 1. Altitude is within ±2.0 minutes of arc, after correction for index error, compared with the assessor's solution; and 2. Time is within ± 2 seconds of the assessor's solution.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.1.D Measure the altitude of the sun at meridian passage (LAN) *Note 1*	Plan and conduct a passage and determine position	*Celestial navigation* Ability to use celestial bodies to determine the ship's position	Aboard a ship or on shore, given a standard marine sextant, a clear or simulated horizon, a clear or partly cloudy sky,	the candidate measures the altitude of the sun as it transits the vessel's meridian.	The candidate's altitude is within ±1.0 minutes of arc, after correction for index error, of the assessor's solution measured at meridian passage.
1.1.E Celestial running fix *Note 1*	Plan and conduct a passage and determine position	*Celestial navigation* Ability to use celestial bodies to determine the ship's position	Aboard a ship at sea, or in a navigation laboratory, when given assumed positions, intercepts, azimuths, times of three observations of the sun, and a standard plotting sheet appropriate for the DR position,	the candidate advances all three lines of position to a common time. *Electronic nautical almanac and celestial navigation calculation software may be used.*	The candidate's position of the running fix is within ±2.0 nm of the assessor's solution.
1.1.F Plot star fix *Note 1*	Plan and conduct a passage and determine position	*Celestial navigation* Ability to use celestial bodies to determine the ship's position	Aboard a ship at sea, or in a navigation laboratory, when given assumed positions, intercepts, azimuths, times of three observations of the stars and a standard plotting sheet appropriate for the DR position,	the candidate plots the three lines of position and advances them to a common time. *Electronic nautical almanac and celestial navigation calculation software may be used.*	The candidate's position of the running fix is within ±2.0 nm of the assessor's solution.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.2.A Position fix by two bearings	Plan and conduct a passage and determine position	*Terrestrial and coastal navigation* Ability to determine the ship's position by use of: .1 Landmarks .2 Aids to navigation, including lighthouses, beacons and buoys .3 Dead reckoning, taking into account winds, tides, currents and estimated speed	On a ship underway, or on a simulator, with land and aids to navigation in sight, using a standard bearing circle, alidade, or other device for taking bearings, and given a chart with a scale of no more than 1:150,000,	the candidate determines the bearings of at least two charted objects and plots them.	The candidate's: 1. Position is within ± 0.10 nm of the assessor's solution; 2. Crossing angles of bearing is not less than 30° nor more than 160° between bearings; 3. Bearings of objects abeam or close to the beam are observed first; and 4. The chart in use is the largest scale suitable for the waters being transited.
1.2.B Plot DR position	Plan and conduct a passage and determine position	*Terrestrial and coastal navigation* Ability to determine the ship's position by use of: .1 Landmarks .2 Aids to navigation, including lighthouses, beacons and buoys .3 Dead reckoning, taking into account winds, tides, currents and estimated speed	On a ship underway, or on a simulator, using a standard plotting sheet or chart, and given the vessels speed made good and course made good for the past 4 hours,	the candidate plots the ship's DR position for every hour for the duration of the watch.	The candidate's position is within ± 0.25 nm of the assessor's solution.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.2.C Determine the course to steer	Plan and conduct a passage and determine position	*Terrestrial and coastal navigation* Ability to determine the ship's position by use of: .1 Landmarks .2 Aids to navigation, including lighthouses, beacons and buoys .3 Dead reckoning, taking into account winds, tides, currents and estimated speed	On a ship underway, or on a simulator, with the ship's speed of at least 10 knots, and using a plotting sheet or chart, when encountering wind and current, which sets the vessel,	the candidate plots the vessel's position on at least two occasions not less than 30 minutes apart, for a vessel steaming at least 10 knots, calculates set and drift by vector analysis, and determines the course to steer to make the intended course.	The course to steer determined by the candidate is within ± 5° of the assessor's solution.
1.3.A Correction of charts and publications	Plan and conduct a passage and determine position	Thorough knowledge of and ability to use nautical charts, and publications, such as sailing directions, tide tables, notices to mariners, radio navigational warnings and ships' routing information	On a ship, or in a navigational laboratory, given notices to mariners and uncorrected charts, and publications,	the candidate makes not less than five chart corrections and three publication corrections.	The candidate: 1. Identifies charts and publications needing correction; 2. Correctly makes corrections to the affected charts and publications; 3. Records all chart corrections on the chart and in the chart-correction record or on the chart-correction spreadsheet; and 4. Records corrections to all publications on the correction page of the publication and on the publication-correction card or the publication-correction spreadsheet.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.3.B Chart selection	Plan and conduct a passage and determine position	Thorough knowledge of and ability to use nautical charts, and publications, such as sailing directions, tide tables, notices to mariners, radio navigational warnings and ships' routing information	On a ship, or in a navigational laboratory, given a voyage of at least 1,000 nm between the port of departure and the port of arrival, and given the appropriate chart catalog,	the candidate identifies the charts needed for the voyage.	The candidate: 1. Correctly identifies and records the names and numbers of the charts; 2. Selects the charts with the largest scales appropriate for the area being transited; and 3. Ensures that there is no gap in chart coverage for any part of the voyage requiring coastal navigation between departure and arrival at any port.
1.3.C Route planning	Plan and conduct a passage and determine position	Thorough knowledge of and ability to use nautical charts, and publications, such as sailing directions, tide tables, notices to mariners, radio navigational warnings and ships' routing information	On a ship, or in a navigation laboratory, when given three waypoints consisting of a position of departure, a position of arrival, and one other way-point, with a total distance of more than 1,000 nm,	the candidate determines the appropriate courses and distances between waypoints, and plots the intended courses on the charts selected.	The candidate: 1. Correctly calculates courses and distances between waypoints; 2. Ensures that the route is the most direct; and 3. Plots the courses on the appropriately scaled charts noting the ETA at each waypoint, including the final waypoint.
1.4.A Position fix by two ranges	Plan and conduct a passage and determine position	*Electronic systems of position fixing and navigation* Ability to determine the ship's position by use of electronic navigational aids	On a marine radar or simulator that meets applicable national and international performance standards, with land and navigational aids displayed, and given a chart with a scale of no more than 1:150,000,	the candidate determines two or more ranges measured from identified charted objects or points of land and plots them.	The candidate's position is within ± 0.10 nm of the assessor's position.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.4.B Position fix by tangents to identified objects	Plan and conduct a passage and determine position	*Electronic systems of position fixing and navigation* Ability to determine the ship's position by use of electronic navigational aids	On an operational marine radar or a radar simulator that meets applicable national and international performance standards, with land and navigational aids displayed, and given a chart with a scale of no more than 1:150,000,	the candidate determines two or more tangents measured from identified-charted objects or points of land and plots them.	The candidate's position is within ± 0.10 nm of the assessor's position.
1.4.C Position fix by GPS	Plan and conduct a passage and determine position	*Electronic systems of position fixing and navigation* Ability to determine the ship's position by use of electronic navigational aids	On a ship underway, or on a simulator, or in a navigation laboratory, using a GPS receiver that meets IMO performance standards,	the candidate initializes the GPS receiver, determines the ship's position and evaluates the accuracy of that position by independent methods.	The candidate: 1. Initializes the system; and 2. Determines the accuracy of the position.
1.4.D Use of GPS position save function	Plan and conduct a passage and determine position	*Electronic systems of position fixing and navigation* Ability to determine the ship's position by use of electronic navigational aids	On a ship underway, on a simulator, or in a navigation lab, using a GPS receiver meeting IMO performance standards, when hearing "Man Overboard,"	the candidate activates the man overboard/ emergency position save function.	The candidate saves or records the ship's position within 1 minute of hearing "Man Overboard."

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.5.A Use of echo sounder	Plan and conduct a passage and determine position	*Echo-sounders* Ability to operate the equipment and apply the information correctly	On a ship underway, using an echo sounder that meets IMO performance standards or a part-task trainer that realistically simulates all the functions and controls of an echo sounder and that meets IMO performance standards,	the candidate turns on, tests, and operates the echo sounder.	The candidate: 1. Turns the system on; 2. Tests the echo sounder in accordance with manufacturer's recommendations; 3. Notes the correct UTC on the echo sounder paper (if fitted); 4. Ensures that the scale selected is the lowest appropriate for the vessel's draft and the depth of water of the area of transit; and 5. Adjusts the sensitivity to obtain proper depth reading on the display and correct trace on the paper (if fitted).
1.6.A Magnetic variation *Course*	Plan and conduct a passage and determine position	*Compass – magnetic and gyro* Knowledge of the principles of magnetic and gyro-compasses	In an approved or accepted Terrestrial Navigation course, when asked to describe variation,	the candidate describes (or selects the answer that describes) variation.	The candidate describes (or selects the answer that describes) variation by: 1. Comparing the locations of the geographic and magnetic poles; and 2. Explaining why an annual change correction is needed.
1.6.B Correct for true heading *Course*	Plan and conduct a passage and determine position	*Compass – magnetic and gyro* Knowledge of the principles of magnetic and gyro-compasses	In an approved or accepted Terrestrial Navigation course, when given a magnetic heading bearing and using the chart provided,	the candidate calculates the true heading.	The candidate's true heading is corrected for variation found on the chart provided and the solution matches the correct true heading within 0.5º.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.6.C Compass deviation *Course*	Plan and conduct a passage and determine position	*Compass – magnetic and gyro* Knowledge of the principles of magnetic and gyro-compasses	In an approved or accepted Terrestrial Navigation course, when asked to describe deviation,	the candidate describes (or selects the answer that describes) deviation.	The description, or the answer selected: 1. Includes the cause of permanent deviation aboard ship; 2. Includes the induced causes of deviation aboard ship; and 3. Explains why deviation changes over time, location, heading, loaded condition; and onboard equipment location.
1.6.D Magnetic compass correction *Course*	Plan and conduct a passage and determine position	*Compass – magnetic and gyro* Knowledge of the principles of magnetic and gyro-compasses	In an approved or accepted Terrestrial Navigation course, when given a magnetic heading bearing and using a deviation table,	the candidate calculates the correct compass heading.	The candidate corrects the compass heading deviation and the solution matches the assessor's solution.
1.7.A Determine the gyro-compass error by bearing of range	Plan and conduct a passage and determine position	*Compass – magnetic and gyro* Ability to determine errors of the magnetic and gyro-compasses, using celestial and terrestrial means, and to allow for such errors	On a ship underway or on a simulator, using navigational or natural terrestrial ranges,	the candidate takes a visual bearing of the range and determines gyro-compass error.	The candidate: 1. Compares the visual bearing to the charted bearing; 2. Determines the gyro-compass error and properly labels it; and 3. Determines the gyro-compass error to within ± 1.0° of the assessor's solution.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.7.B Determine magnetic compass error	Plan and conduct a passage and determine position	*Compass – magnetic and gyro* Ability to determine errors of the magnetic and gyro-compasses, using celestial and terrestrial means, and to allow for such errors	On a ship underway or on a simulator, equipped with both a magnetic and gyro-compass, and given the gyro error and a chart that provides local variation,	the candidate determines the magnetic compass error.	The candidate: 1. Compares the magnetic compass heading to the corrected gyro heading (corrected for a known gyro error); 2. Determines the magnetic compass error and properly labels it; 3. Determines the magnetic compass error to within ± 1.0° of the assessor's solution; and 4. Correctly records it in the compass record book and the ship's log.
1.7.C Determine magnetic compass deviation	Plan and conduct a passage and determine position	*Compass – magnetic and gyro* Ability to determine errors of the magnetic and gyro-compasses, using celestial and terrestrial means, and to allow for such errors	On a ship underway or on a simulator, equipped with both a magnetic and gyro-compass using navigational or natural terrestrial ranges, using only a magnetic compass, and a chart with variation,	the candidate notes the vessel's magnetic-compass heading while aligned on the range and determines magnetic compass deviation.	The candidate: 1. Compares the magnetic compass heading to the charted range bearing; 2. Determines the magnetic compass error and properly labels it; 3. Determines variation from the chart; 4. Determines the magnetic compass deviation to within ± 1.0° of the assessor's solution; and 5. Correctly records it in the compass record book and the ship's log.
1.7.D Determine course to steer by magnetic compass	Plan and conduct a passage and determine position	*Compass – magnetic and gyro* Ability to determine errors of magnetic and gyro-compasses, using celestial and terrestrial means, and to allow for such errors	On a ship underway or on a simulator, equipped with both a magnetic and gyro-compass, and given a deviation table,	the candidate correctly applies the compass error to the course by magnetic compass to make good the intended true course.	The candidate correctly applies the compass error to the magnetic course and the solution is within ± 1.0° of the assessor's solution.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.7.E Position fix by magnetic compass bearings	Plan and conduct a passage and determine position	*Compass – magnetic and gyro* Ability to determine errors of the magnetic and gyro-compasses, using celestial and terrestrial means, and to allow for such errors	On a ship underway or on a simulator, equipped with both a magnetic and gyro-compass, and given a deviation table, and a chart with a scale of no more than 1:150,000,	the candidate correctly applies the compass error to the compass bearings by magnetic compass of at least two charted objects and plots them on the chart in use.	The candidate: 1. Correctly applies compass error to the magnetic compass bearings; and 2. Determines the objects' position to within ± 1.0° of the assessor's solution.
1.7.F Azimuth of the sun	Plan and conduct a passage and determine position	*Compass – magnetic and gyro* Ability to determine errors of the magnetic and gyro-compasses, using celestial and terrestrial means, and to allow for such errors	On a ship underway, and using a standard azimuth circle,	the candidate reads the gyro-compass bearing of the sun and determines gyro-compass error. *Electronic nautical almanac and celestial navigation calculation software may be used.*	The candidate: 1. Reads the azimuth of the sun when the repeater is level; 2. Notes the time of the reading; 3. Determines the true azimuth of the sun for the time of the reading; 4. Compares the gyro-compass to the true azimuth and determines gyro error; and 5. Determines gyro-compass error to within ± 1.0° of the assessor's solution.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.8.A Steering gear test	Plan and conduct a passage and determine position	*Steering control system* Knowledge of steering control systems, operational procedures and change-over from manual to automatic control and vice versa. Adjustment of controls for optimum performance	On a ship underway or on a simulator,	the candidate conducts the pre-departure test of the vessel's steering gear.	The candidate: 1. Turns on the steering control system; 2. Aligns the steering gyro-repeater with the master gyro-compass; 3. Tests the controls for switching pumps and motors between the port and starboard steering systems after the required warm-up period; and 4. Tests the steering systems as follows: a. When the control is switched to hand steering, the rudder is tested throughout its full range of motion: and b. When the control is switched to non-follow-up, the rudder is tested throughout its full range of motion.
1.8.B Set weather controls	Plan and conduct a passage and determine position	*Steering control system* Knowledge of steering control systems, operational procedures and change-over from manual to automatic control and vice versa. Adjustment of controls for optimum performance	On a ship underway or on a simulator equipped with rudder and weather controls, while in auto-pilot,	the candidate sets the rudder and weather controls that are most suitable for the weather and sea conditions.	The candidate sets the: 1. Weather control in accordance with the manufacturer's recommendations for the prevailing sea conditions for the area transited or simulated; and 2. Rate of turn control (if fitted) in accordance with the standing orders.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.9.A Read barometric pressure	Plan and conduct a passage and determine position	*Meteorology* Ability to use and interpret information obtained from shipborne meteorological instruments	On a ship underway or in a laboratory, and using a barometer,	the candidate determines the barometric pressure in millibars, inches or millimeters of mercury.	The candidate: 1. Reads the barometer and applies the appropriate corrections; and 2. Determines the barometric pressure to within 0.5 millibar, 0.02 inch or 0.4 millimeter of the assessor's corrected reading.
1.9.B Determine true wind speed and direction	Plan and conduct a passage and determine position	*Meteorology* Ability to use and interpret information obtained from shipborne meteorological instruments	On a ship underway or in a laboratory, and using an anemometer,	the candidate determines true wind speed and direction.	The candidate converts the apparent wind speed and direction to true wind speed and direction, and the solution is within 10° for direction and 5 knots for speed of the assessor's solution.
1.10.A Characteristics of a cold front *Course*	Plan and conduct a passage and determine position	*Meteorology* Knowledge of the characteristics of the various weather systems, reporting procedures and recording systems	In an approved or accepted Basic Meteorology course, when asked to describe the characteristics of a cold front,	the candidate describes (or selects the answer that describes) the characteristics of a cold front.	The candidate's description (or the answer selected) includes the depiction of the front on a weather map and the expected: 1. Change in the barometer as the front approaches; 2. Change in the barometer after the front passes; 3. Temperature change as the front passes; 4. Wind shift as the front passes; and 5. Precipitation as the front passes.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.10.B Characteristics of a warm front *Course*	Plan and conduct a passage and determine position	*Meteorology* Knowledge of the characteristics of the various weather systems, reporting procedures and recording systems	In an approved or accepted Basic Meteorology course, when asked to describe the characteristics of a warm front,	the candidate describes (or selects the answer that describes) the characteristics of a warm front.	The candidate's description (or the answer selected) includes the depiction of the front on a weather map and the expected: 1. Change in the barometer as the front approaches; 2. Change in the barometer after the front passes; 3. Temperature change as the front passes; 4. Wind shift as the front passes; and 5. Precipitation as the front passes.
1.10.C Characteristics of an occluded front *Course*	Plan and conduct a passage and determine position	*Meteorology* Knowledge of the characteristics of the various weather systems, reporting procedures and recording systems	In an approved or accepted Basic Meteorology course, when asked to describe the characteristics of an occluded front,	the candidate describes (or selects the answer that describes) the characteristics of an occluded front.	The candidate's description (or the answer selected) includes the depiction of the front on a weather map and the expected: 1. Change in the barometer as the front approaches; 2. Change in the barometer after the front passes; 3. Temperature change as the front passes; 4. Wind shift as the front passes; and 5. Precipitation as the front passes.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.10.D Characteristics of a low pressure area *Course*	Plan and conduct a passage and determine position	*Meteorology* Knowledge of the characteristics of the various weather systems, reporting procedures and recording systems	In an approved or accepted Basic Meteorology course, when asked to describe the characteristics of low pressure area	the candidate describes (or selects the answer that describes) the characteristics of a low pressure area.	The candidate's description (or the answer selected) includes the depiction of the low on a weather map and the expected: 1. Change in the barometer as the center of the low pressure system approaches; 2. Change in the barometer after the center of the low passes; 3. Wind shift as the low passes; and 4. Precipitation as the low passes.
1.10.E Characteristics of a high pressure area *Course*	Plan and conduct a passage and determine position	*Meteorology* Knowledge of the characteristics of the various weather systems, reporting procedures and recording systems	In an approved or accepted Basic Meteorology course, when asked to describe the characteristics of a high pressure area,	the candidate describes (or selects the answer that describes) the characteristics of a high pressure area.	The candidate's description (or the answer selected) includes the depiction of the high on a weather map and the expected: 1. Change in the barometer as the center of the high pressure system approaches; 2. Change in the barometer after the center of the high passes; 3. Wind shift as the high passes; and 4. Precipitation as the high passes.
1.10.F Characteristics and expected locations of weather systems *Course*	Plan and conduct a passage and determine position	*Meteorology* Knowledge of the characteristics of the various weather systems, reporting procedures and recording systems	In an approved or accepted Basic Meteorology course, when asked to describe the characteristics and expected locations of weather systems,	the candidate describes (or selects the answer that describes) the characteristics and expected locations of weather systems.	The candidate's description (or the answer selected) includes the: 1. Doldrums; 2. Trade winds; 3. Horse latitudes; 4. Prevailing westerlies; and 5. Polar winds.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
1.10.G Determine expected weather conditions	Plan and conduct a passage and determine position	*Meteorology* Ability to apply the meteorological information available	On a ship or in a laboratory, and using the surface, upper air, and sea state analysis weather maps,	the candidate determines the weather to be encountered during the next 24-hour period.	The candidate's determinations of expected wind, sea, and weather conditions (types and amount of cloud cover, rain, and fog) are based on standard meteorological principles and agree with the assessor's determinations based on the movement of the systems and fronts.
2.1.A Identify light configurations	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972	At night, on a ship underway, on a simulator, or using laboratory equipment,	the candidate identifies vessels through observation of their light configurations.	The candidate correctly identifies the situation or occupation of 9 of 10 vessels that have different light configurations.
2.1.B Identify day shapes	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972	In daylight, on a ship underway, on a simulator, or using laboratory equipment,	the candidate identifies vessels through observation of their required shapes.	The candidate correctly identifies the situation or occupation of 9 of 10 vessels that have different required shapes.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.1.C Identify sound signals	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972	In restricted visibility, on a ship underway, on a simulator, or using laboratory equipment,	the candidate identifies vessels by hearing their required sound signals.	The candidate correctly identifies the situation or occupation of 4 of 5 vessels that have different required shapes.
2.1.D Determine risk of collision	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972	On a ship underway, or a simulator, and using a magnetic compass, gyro-compass repeater (if fitted), azimuth circle, bearing circle or alidade, or other means resulting in equivalent accuracy,	the candidate determines if risk of collision exists with approaching meeting, crossing, and overtaking vessels.	The candidate: 1. Takes two visual bearings of an approaching vessel using an azimuth circle, bearing circle, alidade, or other means resulting in equivalent accuracy, to determine if the bearing to the approaching vessel is appreciably changing, and each observation is within ± 2° of the assessor's solution; and 2. Takes two electronic bearings of an approaching vessel using radar or ARPA, to determine if the bearing to the approaching vessel is appreciably changing, and each observation is within ± 2° of the assessor's solution.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.1.E Maneuver to avoid risk of collision - crossing	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972	On a ship underway, or a simulator, when risk of collision exists with an approaching crossing vessel (from the candidate's starboard side at a relative bearing of between 30° and 112.5°) in good visibility in the open ocean,	the candidate correctly applies the Rules of the Road and maneuvers the vessel to avoid collision, if required.	The candidate: 1. Determines the aspect of the approaching vessel; 2. Identifies the situation as a crossing situation; 3. Takes positive action in ample time in accordance with the Steering and Sailing Rules to achieve a CPA of at least 3 nm; and 4. Makes speed or course changes that are large enough to be readily apparent to another vessel observing visually or by radar.
2.1.F Maneuver to avoid risk of collision - meeting	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972	On a ship underway, or a simulator, when risk of collision with an approaching meeting vessel exists in good visibility in the open ocean,	the candidate correctly applies the Rules of the Road and maneuvers the vessel to avoid collision, if required.	The candidate: 1. Determines the aspect of the approaching vessel; 2. Identifies the situation as a meeting situation; 3. Takes positive action in ample time in accordance with the Steering and Sailing Rules to achieve a CPA of at least 3 nm; and 4. Makes speed or course changes that are large enough to be readily apparent to another vessel observing visually or by radar.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.1.G Maneuver to avoid risk of collision - overtaking	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972	On a ship underway, or a simulator, when risk of collision with an approaching overtaking vessel exists in good visibility in the open ocean,	the candidate correctly applies the Rules of the Road and maneuvers the vessel to avoid collision, if required.	The candidate: 1. Determines the aspect of the approaching vessel; 2. Identifies the situation as an overtaking situation; 3. Attempts VHF communications with the overtaking vessel; 4. Sounds the danger signal, if required by the rules; 5. Takes positive action in ample time in accordance with the Steering and Sailing Rules to achieve a CPA of at least 1 nm; and 6. Makes speed or course changes large enough to be readily apparent to another vessel observing visually or by radar.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.2.A Watch relief	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the principles to be observed in keeping a navigational watch	On a ship underway at sea,	the candidate properly relieves the watch in accordance with STCW Code Section A-VIII/2, Part 3-1, Paragraphs 21 and 22.	The candidate: 1. Reads the standing orders and night orders; 2. Determines and compares the vessel's position, course and speed with the DR position and track; 3. Notes the position of the next charted waypoint; 4. Verifies the identities of critical aids to navigation in sight; 5. Determines tides and current as necessary; 6. Checks and properly tunes the radar and/or ARPA, if fitted; 7. Checks any targets displayed on the radar or ARPA, if fitted; 8. Checks the heading by magnetic compass; 9. Determines the navigational hazards likely to be encountered during the watch; 10. Determines the possible effect of list, trim, water density and squat on under keel clearance; 11. Ensures that he/she receives courses, traffic, weather and any special instructions from the officer being relieved; and 12. Tells the officer being relieved that he or she is relieved.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.2.B Keep a safe navigation watch	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the principles to be observed in keeping a navigational watch	On a ship underway at sea,	the candidate properly keeps a safe and environmentally sound navigational watch in accordance with STCW Code Section A-VIII/2, Part 3-1, Paragraphs 23 to 50.	The candidate ensures that the: 1. Voyage plan is closely and continuously monitored; 2. Proper lookout is maintained by all available means; 3. Safe speed is maintained; 4. Position, course, and speed are checked at frequent intervals; 5. Steering mode selected is appropriate; 6. Under-keel clearance is suitable for the draft of the vessel at all times; 7. Course changes are made in accordance with the voyage plan; 8. Vessel's position is fixed and plotted on an appropriate chart at intervals suitable to the vessel's speed and the area being transited; 9. Identities of critical aids to navigation in sight are determined; 10. More than one method, including electronic and other navigational equipment, external fixed aids, geographic reference points, and hydrographic contours, is used to fix the vessel's position and check the accuracy of fixes; 11. Radio equipment is frequently checked and found to be functioning properly; 12. Risk of collision with approaching vessels is determined and early and substantial action, if required, is taken in accordance with COLREGS; (*Continued on next page*)

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.2.B *(Continued)* Keep a safe navigation watch					(*Continued from previous page*) 13. Rudder and engine orders are executed as ordered; 14. Validity of the gyro input to all navigation equipment is verified; 15. Magnetic compass and gyro errors are determined by any available means and the error is logged; 16. Magnetic variation and compass deviation are correctly applied to courses and bearings; 17. Person steering is competent; 18. tide and current conditions for the watch period are determined in coastal and tidal waters; 19. Set and drift are determined and applied to allow for set and drift; 20. Weather conditions on board the ship are correctly and timely recorded and reported as required; 21. Running lights are checked throughout the watch period; 22. Master is notified as directed by all Master's or standing orders; 23. All relevant navigation information is used to identify protected marine habitats, areas and sanctuaries; and 24. All required log entries are made.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.2.C Notify Master when appropriate	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the principles to be observed in keeping a navigational watch	On a ship underway at sea,	the candidate notifies the Master as instructed, and when in doubt of other vessel's intentions, or in any circumstances that affect the routine navigation of the vessel in accordance with STCW Code Section A-VIII/2, Part 3-1, Paragraph 40.	The candidate notifies the Master immediately when the following occur: 1. Restricted visibility is encountered or expected; 2. Vessel traffic density or the movement of other ships causes concern; 3. Difficulty is experienced in maintaining course; 4. Failure to sight land or a navigational mark, or to obtain soundings when expected; 5. Aids to navigation are not in position or are displaying incorrect characteristics; 6. Land or a navigational mark is sighted unexpectedly, or soundings change unexpectedly; 7. Engines or their control systems, steering, or any essential navigational equipment fails, or alarms or indicators for these systems fail; 8. Any radio equipment fails; 9. Concerns arise in heavy weather about damage to the vessel or cargo; 10. Any hazard to navigation that poses a threat to the vessel is noticed; 11. Any doubt about the ship's safety or other emergency arises; or 12. Any changes are made to the voyage plan.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.2.D Keep a safe anchor watch	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the principles to be observed in keeping a navigational watch	On a ship underway, at anchor, with wind and seas building,	the candidate properly keeps a safe anchor watch in accordance with STCW Code Section A-VIII/2, Part 3-1, Paragraph 51.	The candidate ensures that: 1. Vessel's position is determined and swing is plotted; 2. Vessel's position is frequently checked by visual and radar bearings and radar ranges from the same charted objects; 3. GPS anchor alarms are established; 4. Proper lookout is maintained; 5. Periodic inspections are made; 6. When necessary, a rating is posted at the anchor to carry out orders with respect to the anchor; 7. Weather, tides, and sea state are monitored; 8. The Master is notified immediately when the weather changes, visibility becomes restricted, or the anchor starts to drag; 9. Engines are ready for immediate use, where conditions require (open roadsteads, strong winds, or current and poor holding ground); and 10. All required lights, shapes, and sounds are properly shown /sounded.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.2.E Turn over a watch	Maintain a safe navigational watch	*Watchkeeping* Thorough knowledge of the principles to be observed in keeping a navigational watch	On a ship underway at sea,	the candidate properly turns the watch over.	The candidate ensures that: 1. DR position is plotted on the chart in use for the end of the watch; 2. Vessel's position is determined and plotted by all means appropriate to the area being transited; 3. Required weather data is read and recorded in the deck log; 4. Heading of the magnetic compass is checked and recorded; 5. Movement of all vessel traffic is checked by visual and electronic means immediately before being relieved; 6. Vessel's course and speed, posting of special lookouts, steering mode in use, and weather and visibility are relayed to the relieving officer; 7. Any special instructions regarding occurrences during the past watch or which are expected during the next watch are related; 8. All relevant information concerning vessels in sight, or on the radar or ARPA, is reported to the relieving officer; (*Continued on next page*)

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.2.E *(Continued)* Turn over a watch					(*Continued from previous page*) 9. The Master is notified if there is any doubt that the relieving officer is competent to perform his or her duties; 10. If the Master or pilot has the con, details concerning delegated responsibilities are relayed; and 11. Watch is not turned over during a maneuver or other action taken to avoid a hazard to navigation.
2.3.A Voyage Planning - Appraisal	Maintain a safe navigational watch	*Watchkeeping* The use of routing in accordance with the General Provisions on Ships' Routing	On a ship, on a simulator, or in a navigation laboratory, when given a port of departure and a port of arrival not more than 1,000 nm apart,	the candidate collects the information to plan a safe and environmentally sound voyage plan, taking into account paragraph 2 of the annex to IMO Assembly Resolution A893(21) .	The candidate ensures that the following are taken into account when creating a voyage plan: 1. Condition of the vessel, its stability, equipment, operational limitations, draft, and maneuvering characteristics; 2. Any special characteristics of the cargo and its stowage; 3. Crewmembers' competency and rest status; 4. Validity of all vessel certificates and documents; 5. Up-to-date charts of proper scale, and the latest notices to mariners and radio navigational warnings; (*Continued on next page*)

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.3.A *(Continued)* Voyage Planning - Appraisal					(*Continued from previous page*) 6. Up-to-date coast pilots, sailing directions, and other information sources appropriate for the voyage; 7. Relevant routing guides; 8. Up-to-date tide and current tables and atlases; 9. Weather information; 10. Weather routing services; 11. Ship reporting systems, VTS, and environmental protection measures; 12. Vessel traffic density for the route; 13. Pilotage requirements and information exchange; and 14. Port information, including emergency response capability.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.3.B Voyage Planning - Planning	Maintain a safe navigational watch	*Watchkeeping* The use of routing in accordance with the General Provisions on Ships' Routing	On a ship, a simulator, or in a navigation laboratory, when given a port of departure and a port of arrival that are between 600 nm and 1,000 nm apart,	the candidate plans a safe and environmentally sound voyage plan, taking into account paragraph 3 of the annex to IMO Assembly Resolution A893(21).	The candidate: 1. Plots courses on appropriately scaled charts noting the ETA at each way point, including the final way point; 2. Correctly calculates and indicates courses and distances between way points on the charts; 3. Calculates the most direct route that avoids all hazards to navigation by a margin of safety of 3 nm; 4. Determines the areas of all required speed changes; 5. Determines positions requiring a change of machinery status; 6. Determines the waypoint for all course changes; 7. Determines the state of the tide and currents at the port of departure for the times of departure and transit; 8. Creates a contingency plan for alternative actions in cases of emergency; 9. Determines all relevant navigation information used to identify protected marine habitats, areas and sanctuaries; and 10. Reviews the voyage plan with the Master and deck officers.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.3.C Execute a voyage plan	Maintain a safe navigational watch	*Watchkeeping* The use of routing in accordance with the General Provisions on Ships' Routing	On a ship or a simulator, when given a voyage plan,	the candidate executes the plan, taking into account paragraph 4 and 5 of the annex to IMO Assembly Resolution A893(21).	The candidate: 1. Checks the reliability and condition of navigational equipment frequently; 2. Applies basic information obtained from the tide tables and other navigational publications to determine under keel clearance; 3. Fixes position at appropriate intervals; 4. Frequently checks compasses; 5. Assesses meteorological information; 6. Determines compass error; 7. applies set and drift and other needed course corrections; 8. Correctly operates and applies information from electronic navigation systems; 9. Correctly operates the radar and ARPA, if fitted, and applies the information for navigation and collision avoidance; 10. Correctly operates propulsion and steering systems to control heading and speed; 11. Initiates action in the event of a real or simulated equipment malfunction or failure of major items of equipment; 12. Correctly conducts radio-communications; 13. Monitors and correctly operates safety and alarm systems; and 14. Closely and continuously monitors the voyage plan.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.4.A Situational awareness	Maintain a safe navigational watch	*Watchkeeping* The use of information from navigational equipment for maintaining a safe navigational watch	On a ship, or on a simulator during an exercise at sea, in clear visibility and with light to moderate traffic,	the candidate demonstrates, through the course of a full watch, the integration of navigational, bridge resource management, and seamanship skills.	The candidate maintains situational awareness with regard to: 1. Hazards to navigation; 2. Navigational landmarks; 3. The vessel's location relative to the intended track; 4. Maritime traffic, both with a potential for collision and being well clear; 5. Weather; 6. Sea state; 7. Location and duties of watch partners; 8. Limitations in propulsion and steering systems; and 9. Maintaining appropriate communications.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.5.A Navigate in restricted visibility	Maintain a safe navigational watch	*Watchkeeping* Knowledge of blind pilotage techniques	On a ship underway or on a simulator during an exercise at sea, when visibility becomes restricted while underway,	the candidate recognizes the restricted visibility and takes appropriate action to navigate in restricted visibility in accordance with STCW Code Section A-VIII/2, Part 3-1, Paragraph 45.	The candidate: 1. Determines the restricted visibility; 2. Notifies Master of restricted visibility; 3. Switches to hand steering; 4. Posts a proper lookout and turns the running lights on; 5. Adjusts the vessel's speed in accordance with Rule 6; 6. Sounds the required sound signals; 7. Sets the radar and/or ARPA on the appropriate scale to scan at long range for other vessels; 8. Plots all approaching targets on the radar or ARPA, if fitted; and 9. Uses radar or ARPA, if fitted, to obtain early warning of risk of collision and to determine the speed and direction of relative motion.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.6.A Vessel Traffic System (VTS)	Maintain a safe navigational watch	*Watchkeeping* The use of reporting in accordance with the General Principles for Ship Reporting Systems and with VTS procedures	On a ship, or on a simulator,	the candidate establishes and maintains communication with a Vessel Traffic System (VTS).	The candidate: 1. Establishes communications with a VTS; 2. Provides the initial information exchange as required by the VTS; 3. Updates information during transit as required by the VTS; 4. Updates information as required by the VTS, if the vessel anchors and/or berths; and 5. Closes communications with the VTS as the vessel departs the VTS jurisdiction.
2.7.A Recognition of watch condition	Maintain a safe navigational watch	*Bridge resource management* Knowledge of bridge resource management principles, including: .1 Alocation, assignment, and prioritization of resources .2 Effective communication .3 Assertiveness and leadership .4 Obtaining and maintaining situational awareness .5 Consideration of team experience	On a ship at sea or on a simulator during an exercise at sea, when help is needed because of restricted visibility, vessel traffic or safety of navigation,	the candidate recognizes the need for additional personnel on the bridge and notifies the Master.	The candidate notifies the Master immediately if: 1. Vessel encounters or expects to encounter restricted visibility; 2. There is cause for concern because of vessel traffic density or the movements of other ships; 3. Vessel will transit restricted waters with vessel traffic; or 4. Fatigued to the point that decision making is affected.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.7.B BRM Condition III Collision Avoidance	Maintain a safe navigational watch	*Bridge resource management* Knowledge of bridge resource management principles, including: .1 Allocation, assignment, and prioritization of resources .2 Effective communication .3 Assertiveness and leadership .4 Obtaining and maintaining situational awareness .5 Consideration of team experience	On a ship at sea or on a simulator during an exercise at sea, and with a bridge team in place for navigating in congested near coastal waters with or without reduced visibility, and assigned to monitor vessel's traffic, using radar or ARPA that meets all national and international performance requirements,	the candidate identifies all vessels (targets) posing a risk or danger of collision and provides appropriate information and recommendations on vessel traffic and any other situation or condition that may affect the safe navigation of the vessel to the conning officer.	The candidate: 1. Determines the risk and danger of collision of all approaching vessels within 6 minutes; 2. Immediately notifies the watch officer of the relative position of the threatening vessel, its CPA and TCPA; 3. Recommends course changes in accordance with COLREGS to remove the risk of collision and prevent close-quarters situations from developing; 4. Ensures that all recommended course or speed changes result in increasing the CPA of approaching vessels identified as posing a risk or danger of collision; 5. Ensures that all recommended course changes provide sufficient sea room and bottom clearance for the area being transited; 6. Ensures that communications are clear, immediate, reliable, and relevant; and 7. Ensures that non-essential activities are avoided.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.7C BRM Condition III Navigation	Maintain a safe navigational watch	*Bridge resource management* Knowledge of bridge resource management principles, including: .1 Allocation, assignment, and prioritization of resources .2 Effective communication .3 Assertiveness and leadership .4 Obtaining and maintaining situational awareness .5 Consideration of team experience	On a ship at sea or on a simulator during an exercise at sea, and with a bridge team in place for navigating in congested near coastal waters with or without reduced visibility, and assigned to monitor vessel's position, communicate on the VHF, and all other bridge duties, using an IMO compliant ARPA, a GPS or DGPS receiver and all the bridge equipment identified in the standard,	the candidate determines and plots the vessel's position by electronic and visual means, communicates as required on the VHF, carries out all engine commands, ensures that all rudder commands are properly carried out, and makes all appropriate logbook entries.	The candidate: 1. Uses visual and electronic means to determine the ship's position, including GPS or DGPS, radar, ARPA, ECDIS (if fitted), and echo sounder; 2. Plots the vessel's position in accordance with tolerances stated previously at regular intervals appropriate to the vessel's speed and the area being transited; 3. Determines the correct courses to steer to maintain the ship on the intended track and recommends them to the conning officer; 4. Answers all VHF calls to own ship and makes calls to other ships in the area and to port authorities as required; 5. Monitors the helmsman to ensure all rudder commands are carried out; 6. Ensures that communications are clear, immediate, reliable, and relevant; 7. Ensures that non-essential activities are avoided; and 8. Makes all required entries in the appropriate vessel's logs.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.7.D BRM Condition II or III – error trapping	Maintain a safe navigational watch	*Bridge resource management* Knowledge of bridge resource management principles, including: .1 Allocation, assignment, and prioritization of resources .2 Effective communication .3 Assertiveness and leadership .4 Obtaining and maintaining situational awareness .5 Consideration of team experience	On a ship underway in restricted visibility with increased traffic, land/shoals affecting navigation, or on a simulator during an exercise at sea, and with a bridge team in place for navigating in congested near coastal waters with or without reduced visibility, and assigned duties as an officer in a bridge team, when one of the following occur: 1. An incorrect rudder order is given; 2. A rudder or engine command is not given at the proper time to maintain intended track; 3. A navigational aid is misidentified; 4. The vessel's position is improperly fixed; or 5. Target vessel's movements are improperly stated;	the candidate monitors his or her vessel's movement, recognizes the erroneously-stated information about the vessel's position or target vessel's movement, and notifies the conning officer of specific questions regarding the vessel's situation.	The candidate: 1. Detects the misinformation or command error; and 2. Notifies the watch officer within 30 seconds of the occurrence of the error (for helm orders, the candidate detects the error and issues a corrective order consistent with the order from the watch officer within 5 seconds).

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.7.E BRM Condition II or III prioritization	Maintain a safe navigational watch	*Bridge resource management* Knowledge of bridge resource management principles, including: .1 Allocation, assignment, and prioritization of resources .2 Effective communication .3 Assertiveness and leadership .4 Obtaining and maintaining situational awareness .5 Consideration of team experience	On a ship at sea or on a simulator during an exercise at sea, and with a bridge team in place for navigating in congested near coastal waters with good visibility, and given the following: 1. A vessel on own ship's starboard bow changes course and creates a risk of collision; 2. There is insufficient water depth for own ship to turn to starboard; 3. The diesel engines are using heavy fuel; 4. A vessel ahead is on a reciprocal course 1.5 nm away with a CPA of 0.5 nm on the port side; and 5. The GMDSS distress alarm sounds,	the candidate determines the appropriate action to take.	The candidate: 1. Assesses the situation; 2. Determines which priority action must be taken for the safety of the vessel; 3. Recommends that the engines be slowed or stopped in sufficient time to avoid the collision with the vessel on the starboard bow; and 4. Acknowledges the distress call after the danger of collision is over.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.7.F BRM Condition II Navigation and collision avoidance	Maintain a safe navigational watch	*Bridge resource management* Knowledge of bridge resource management principles, including: .1 Allocation, assignment, and prioritization of resources .2 Effective communication .3 Assertiveness and leadership .4 Obtaining and maintaining situational awareness .5 Consideration of team experience	On a ship at sea or on a simulator during an exercise at sea, when acting as part of the bridge team, and assigned duties to monitor the vessel's navigation and determine the risk of danger of collision with all vessels underway in open sea, using ARPA meeting all national and international performance requirements, a GPS or DGPS receiver and all the bridge equipment identified in the standard,	the candidate determines and plots the vessel's position at suitable intervals, and plot or systematically observes all approaching vessels and informs the bridge team of dangers to navigation, intended course changes, and vessels that pose a risk or danger of collision.	The candidate: 1. Determines the vessel's position and plots it at suitable intervals; 2. Identifies all aids to navigation; 3. Notifies the bridge team immediately of the following: a. When planned course changes must be made; b. Effects of tides or currents are setting the vessel off its intended course; or c. There is doubt about the vessel's position; 4. Determines by visual and radar/ARPA bearings that risk and danger of collision exists with approaching vessels in vicinity; and 5. Notifies the bridge team of the following: a. Danger or risk of collision exists with any approaching vessel; b. Recommended course change to avoid the risk or danger of collision; and c. Recommended speed change to avoid the risk or danger of collision if the engines are available.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
2.7.G BRM Condition III establish a bridge team	Maintain a safe navigational watch	*Bridge resource management* Knowledge of bridge resource management principles, including: .1 Allocation, assignment, and prioritization of resources .2 Effective communication .3 Assertiveness and leadership .4 Obtaining and maintaining situational awareness .5 Consideration of team experience	On a ship at sea or on a simulator during an exercise at sea, to establish a bridge team to monitor the vessel's navigation and determine the risk or danger of collision with all vessels,	the candidate determines the number of officers and crewmembers required to safely navigate the vessel and assigns individual officers and crewmembers specific duties and functions as part of the bridge team.	The candidate assigns the bridge team duties, considering their background, experience, and abilities, to the following tasks: 1. Conning; 2. Lookout; 3. Collision avoidance; 4. Navigation; 5. Communication; and 6. Administration.
3.1.A Radar fundamentals *Course*	Use of radar and ARPA to maintain safety of navigation	*Radar navigation* Knowledge of the fundamentals of radar and automatic radar plotting aids (ARPA)	This KUP is demonstrated if the candidate has successfully completed the Radar Observer course specified in 46 CFR 11.309(a)(4)(ii) within the previous 5 years or holds a valid Radar Observer (Unlimited) endorsement.		

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.2.A Set up and maintain radar display	Use of radar and ARPA to maintain safety of navigation	*Radar navigation* Ability to operate and to interpret and analyze information obtained from radar, including setting up and maintaining displays	On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards,	the candidate sets up and maintains the radar display.	The candidate, within 3 minutes after the power is turned on: 1. Switches the set from standby to transmit; 2. Selects the appropriate scale; 3. Adjusts the gain control so that targets and sea return appear; 4. Adjusts the tune control (if the unit is not self-tuning); 5. Adjusts the brilliance control; 6. Adjusts the sea clutter and rain clutter controls to suppress the rain and sea clutter without losing targets; and 7. Selects the north-up stabilized relative motion.
3.2.B Switch display modes	Use of radar and ARPA to maintain safety of navigation	*Radar navigation* Ability to operate and to interpret and analyze information obtained from radar, including setting up and maintaining displays.	On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards,	the candidate switches the display from north-up stabilized relative motion to true motion to head-up, and states how to recognize the mode displayed.	Within 15 seconds, the candidate: 1. Switches the display from north-up stabilized relative motion to true motion; 2. Switches the display from true motion to head-up; and 3. Points to the location on the display of the information that indicates the mode displayed.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.3.A Identify false echoes, sea return, racon and SART	Use of radar and ARPA to maintain safety of navigation	*Radar navigation* Ability to operate and to interpret and analyze information obtained from radar, including detection of misrepresentation of information, false echoes, sea return, etc., racons and SARTs	On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards,	the candidate identifies false echoes, sea return, a racon, and SARTs.	The candidate recognizes and correctly identifies: 1. False echoes: a. Indirect or false echoes; b. Side-lobe effects; c. Multiple echoes; d. Second-trace echoes; e. Electronic interference; and f. Spoking; 2. Sea return; 3. Racons; and 4. SARTs.
3.4.A Determine range and bearing	Use of radar and ARPA to maintain safety of navigation	*Radar navigation* Ability to operate and to interpret and analyze information obtained from radar, including the following: range and bearing; course and speed of other ships; time and distance of closest approach of crossing, meeting overtaking ships	On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards,	the candidate determines the range and bearing to an object.	The candidate determines the range and bearing to an object selected by the assessor within 30 seconds and the candidate's: 1. Range is within ± 0.1 nm of the assessor's solution or ± 1% of the range scale in use; and 2. Bearing is within ± 1° of the assessor's solution.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.4.B Determine risk of collision	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from radar, including the following identification of critical echoes; detecting course and speed changes of other ships; effect of changes in own ship's course or speed or both	On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, set on the 12-mile scale, with at least 5 vessels on the display,	the candidate determines if risk of collision or danger of collision exists with all approaching vessels.	The candidate: 1. Identifies all: a. Approaching vessels whose bearings do not change appreciably; and; b. Vessels that have a CPA of less than 3 nm; and 2. Makes all determinations within 8 minutes of determining the initial range and bearing of each vessel.
3.4.C Determine DRM, SRM, CPA, and TCPA	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from radar, including the following range and bearing; course and speed of other ships; time and distance of closest approach of crossing, meeting overtaking ships	On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, set on the 12-mile scale,	the candidate determines the: 1. Range and bearing to three other ships (meeting, crossing, and overtaking); 2. DRM and SRM of all other ships; and 3. CPA and TCPA of all vessels on the 12-mile scale with less than a 3-mile CPA.	The candidate completes the: 1. Range and bearing solution within 30 seconds and within the previously stated tolerances; 2. DRM solution within 6 minutes and ± 5° of the assessor's solution; 3. SRM solution within 7 minutes of initial range and bearing and ±2 knots of the assessor's solution; 4. CPA solution within 7 minutes and ± 0.5 nm of the assessor's solution; and 5. TCPA solution within 8 minutes and ± 3 minutes of the assessor's solution.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.4.D Detect speed and course change of other ships	Use of radar and ARPA to maintain safety of navigation	Ability to operate and interpret and analyze information obtained from radar, including the following: identification of critical echoes; detecting course and speed changes of other ships; effect of changes in own ship's course or speed or both	On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, set on the 12-mile scale, in the stabilized relative motion north-up mode, and with meeting or crossing targets,	the candidate detects speed and course changes of other ships that result in a change in the direction or speed of relative motion.	The candidate detects other ships' speed changes of at least 5 knots and/or course changes of at least 10° within 10 rotations of the sweep (30 seconds) from the time he or she begins systematic observation of the display.
3.4.E Change course to control target DRM	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from radar, including the identification of critical echoes; detecting course and speed changes of other ships; effect of changes in own ship's course or speed or both and application of the International Regulations for Preventing Collisions at Sea, 1972	On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, set on the 12-mile scale, in the stabilized relative motion north-up mode, with a ship on the starboard bow with a CPA of 0.5 nm,	the candidate controls the target vessel's DRM by changing own ship's course in accordance with the COLREGS.	The candidate: 1. Determines the new course to steer to achieve a 2 nm CPA; 2. Executes a turn to starboard; and 3. Achieves a CPA of not less than 1.8 nm or more than 2.2 nm.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.4.F Change speed to control target DRM	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from radar, including the following: detecting course and speed changes of other ships; effect of changes in own ship's course or speed or both and application of the International Regulations for Preventing Collisions at Sea, 1972	On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, set on the 12-mile scale, in the stabilized relative motion north-up mode, with a vessel on the beam with a CPA of less than 0.5 nm,	the candidate controls the target vessel's DRM by changing own ship's speed in accordance with the COLREGS.	The candidate: 1. Determines the new speed to achieve a CPA of 2 nm; 2. Executes a speed reduction; and 3. Achieves a CPA of not less than 1.8 nm or more than 2.2 nm.
3.4.G Determine true course and speed of target vessels	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from radar, including the following plotting techniques and relative- and true-motion concepts	On an operational radar or simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, set on the 12-mile scale, in the stabilized relative motion north-up mode, using any graphically correct method,	the candidate determines the true course and speed of three target vessels.	The candidate: 1. Constructs a relative triangle on either a reflection plotter, a maneuvering board or a transfer plotting sheet; and 2. Solves for the target vessel's true course and speed within 8 minutes. 3. Determines the true course solution within ± 5° and the true speed solution within ± 5 knots of the assessor's solution.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.4.H Parallel indexing	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from radar, including the following use of parallel indexing	On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, set on the 12-mile scale, in the stabilized relative motion north-up mode, with aids to navigation and a coastline displayed on the display,	the candidate uses a parallel index line to monitor and maintain the vessel on track.	The candidate: 1. Constructs a parallel index line through the edge of the known hazard to navigation or land mass; 2. Monitors the vessel's movement by referring to the relative position of the PI in relation to the land mass or other fixed radar conspicuous target; and 3. Ensures the vessel drifts not more than 10% of the set distance toward the known hazard or land mass.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.5.A Set up and maintain an ARPA display *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards,	the candidate sets up and maintains the ARPA display.	Within 3 minutes, the candidate: 1. Turns the power on; 2. Initializes the performance monitor; 3. Notes error messages; 4. Switches from standby to on; 5. Selects the appropriate scale; 6. Adjusts the gain control so that targets and sea return appear; 7. Adjusts the tune control (if the unit is not self-tuning); 8. Adjusts the brilliance control; 9. Adjusts the sea clutter and rain clutter control to suppress the rain and sea clutter without losing targets; 10. Selects display north-up stabilized relative motion; 11. Selects proper gyro course and speed input; and 12. Selects sea-stabilized mode.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.6.A Manual target acquisition *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including system performance and accuracy, tracking capabilities and limitations, and processing delays and operational warnings and system tests	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with at least 10 targets on the selected range,	the candidate acquires 10 targets manually.	The candidate manually acquires 10 targets within 2 minutes.
3.6.B Establish an exclusion area *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including methods of target acquisition and their limitations	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale, and in automatic acquisition,	the candidate establishes an exclusion area that suppresses the automatic acquisition of targets in that area.	The candidate establishes an exclusion area within 2 minutes on the port or starboard side of the vessel that is either: 1. Described by an arc of 90° on the appropriate side of the vessel; or 2. Described by a line parallel to the vessel's track 4 nm from the vessel.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.6.C Set vector characteristics *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including true and relative vectors, graphic representation of target information and danger areas	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale,	the candidate switches between true and relative vectors and changes the length of the vectors from 6 minutes to 30 minutes.	The candidate: 1. Switches between true and relative vectors; and 2. Changes the length of the vectors within 10 seconds.
3.6.D Designate targets *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including true and relative vectors, graphic representation of target information and danger areas	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale,	the candidate designates two acquired targets.	The candidate: 1. Designates two acquired targets for an alphanumeric display of the target information; and 2. Ensures that the designation is completed within 10 seconds for each target.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.6.E Cancel targets *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including true and relative vectors, graphic representation of target information and danger areas	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards,	the candidate cancels a single target.	The candidate cancels a single target within 5 seconds.
3.6.F Target history *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including true and relative vectors, graphic representation of target information and danger areas,	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale,	the candidate demonstrates the ability to display a target's history.	The candidate correctly: 1. Operates the controls that display a target's history; and 2. Displays the target's history within 10 seconds.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.6.G Establish CPA and TCPA *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including true and relative vectors, graphic representation of target information and danger areas	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale,	the candidate establishes the CPA and TCPA for dangerous targets.	The candidate: 1. Determines the parameters for dangerous targets by entering a minimum CPA and a minimum TCPA; and 2. Completes data entry of CPA and TCPA within 1 minute.
3.6.H Establish alarm area *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including true and relative vectors, graphic representation of target information and danger areas	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale,	the candidate establishes an alarm area with outer and inner guard rings.	The candidate establishes an alarm area with an outer guard ring of 8 nm and an inner guard ring of 4 nm within 2 minutes.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.6.I Trial maneuver *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including deriving and analyzing information, critical echoes, exclusion areas and trial maneuvers	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale, with at least 10 targets within 12 nm of own ship,	the candidate demonstrates the trial maneuver function.	The candidate: 1. Accesses the trial maneuver mode; 2. Enters course changes; 3. Determines the course to steer to avoid all targets by at least 2 nm, within 30 seconds; 4. Enters speed changes; 5. Determines the speed necessary to avoid all targets by at least 2 nm, within 30 seconds; and 6. Returns the display to real time.
3.6.J Switch stabilization modes *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including deriving and analyzing information, critical echoes, exclusion areas and trial maneuvers	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale,	the candidate switches the display from a north-up relative motion sea stabilized display to a true motion ground stabilized.	The candidate completes the change within 10 seconds.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.6.K Determine range and bearing to an object *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including deriving and analyzing information, critical echoes, exclusion areas and trial maneuvers	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale,	the candidate determines the range and bearing to an object.	The candidate: 1. Determines the range and bearing to an object selected by the assessor within 30 seconds by positioning the VRM on the edge of the object that is closest to the vessel and positioning the EBL through the object; 2. Obtains a range within ± 0.1 nm of the assessor's solution or within ± 1% of the range scale in use; and 3. Obtains a bearing within ± 1° of the assessor's solution.
3.6.L Navigation lines *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including deriving and analyzing information, critical echoes, exclusion areas and trial maneuvers	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale, using 2 nav marks and 1 nav line,	the candidate establishes a nav line to monitor and maintain the vessel on track.	The candidate: 1. Constructs a nav line between the 2 nav marks and through the seaward edge of the known hazard to navigation or land mass; 2. Positions the VRM at a distance named by the assessor from the edge of the nav line; 3. Monitors the vessel's movement to determine if the edge of the VRM moves inside the nav line; and 4. Ensures that the VRM does not drift more than 10% of the VRM distance inside the nav line.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.6.M Determine set and drift *Course* *ARPA*	Use of radar and ARPA to maintain safety of navigation	Ability to operate and to interpret and analyze information obtained from ARPA, including deriving and analyzing information, critical echoes, exclusion areas and trial maneuvers echoes, exclusion areas and trial maneuvers	In an approved or accepted ARPA course using an ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with the ARPA on the 12-mile scale,	the candidate determines the set and drift of the vessel.	The candidate: 1. Ensures that the display is sea stabilized; 2. Identifies, acquires, and designates a stationary target; and 3. Reads the target's course and speed as the set and drift within 3 minutes.
4.1.A *Course* *ECDIS*	Use of ECDIS to maintain the safety of navigation	*Navigation using ECDIS* Knowledge of the capability and limitations of ECDIS	This KUP is demonstrated by successful completion of an approved or accepted ECDIS course.		
4.2.A *Course* *ECDIS*	Use of ECDIS to maintain the safety of navigation	*Navigation using ECDIS* Proficiency in operation, interpretation, and analysis of information from ECDIS	This KUP is demonstrated by successful completion of an approved or accepted ECDIS course.		
5.1.A Passenger safety	Respond to emergencies	*Emergency procedures* Precautions for the protection and safety of passengers in emergency situations	When asked by a qualified assessor,	the candidate describes the precautions for the protection and safety of passengers in emergency situations.	The candidate's description is appropriate for the described situation.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.2.A Action following collision or grounding	Respond to emergencies	*Emergency procedures* Initial action to be taken following a collision or a grounding; initial damage assessment and control	When asked by a qualified assessor,	the candidate describes the initial action to be taken following a collision or a grounding.	The candidate's description is appropriate for the described situation and includes initial damage assessment and control.
5.3.A Rescuing persons from the sea, assisting a ship in distress, emergencies in port.	Respond to emergencies	*Emergency procedures* Appreciation of the procedures to be followed for rescuing persons from the sea, assisting a ship in distress, responding to emergencies which arise in port	When asked by a qualified assessor,	the candidate describes the procedures to be followed for rescuing persons from the sea, assisting a ship in distress, responding to emergencies that arise in port.	The candidate's description is appropriate for the described situation.
6.1.A IAMSAR Manual *Course*	Respond to a distress signal at sea	*Search and rescue* Knowledge of the contents of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual	This KUP is demonstrated by successful completion of the Search and Rescue course specified in 46 CFR 11.309(a)(4)(iii).		

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
7.1.A SMCP *Course*	Use the IMO Standard Marine Communication Phrases and use English in written and oral form	*English language* Adequate knowledge of English language to enable the officer to use charts and nautical publications, understand meteorological information and messages concerning ship's safety and operation, to communicate with other ships, coast stations and VTS centers and to perform the duties with a multilingual crew, including ability to use and understand IMO Standard Marine Communication Phrases (SMCP)	This KUP is demonstrated by successful completion of the training in IMO Standard Marine Communication Phrases (SMCP) specified in 46 CFR 11.309(a)(4)(ix).		
8.1.A International Code of Signals *Course*	Transmit and receive information by visual signaling	*Visual signaling* Ability to use the International Code of Signals	This KUP is demonstrated by successful completion of the Visual Signaling course specified in 46 CFR 11.309(a)(4)(vi).		
8.2.A Receive information by Morse light *Course*	Transmit and receive information by visual signaling	Ability to transmit and receive, by Morse light, distress signal SOS and single-letter signals as specified in the International Code of Signals	This KUP is demonstrated by successful completion of the Visual Signaling course specified in 46 CFR 11.309(a)(4)(vi).		

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
9.1.A Turning circles and stopping distances *Course*	Maneuver the ship	*Ship maneuvering and handling* Knowledge of the effects of deadweight, draught, trim, speed and under keel clearance on turning circles and stopping distances	In an approved or accepted Basic Ship Handling course, when asked to describe the effects of deadweight, draught, trim, speed, and under-keel clearance on turning circles and stopping distances,	the candidate describes (or selects the answer(s) that describe) the effects of deadweight, draught, trim, speed, and under-keel clearance on turning circles and stopping distances.	The candidate describes (or selects the answer(s) that describe) how changes in the following will affect the ship's maneuvering characteristics: 1. Deadweight; 2. Draft; 3. Trim; 4. Speed; and 5. Under-keel clearance.
9.2.A Course change of more than 45°	Maneuver the ship	*Ship maneuvering and handling* Knowledge of the effects of wind and current on ship handling	On a ship at sea or in a simulator,	the candidate orders the vessel left or right more than 45° from the original heading.	The candidate: 1. Orders the turn left or right more than 45° from the original heading by applying a minimum of 10° and a maximum of 20° of rudder; 2. Reduces rudder as the ship approaches the new course; and 3. Steadies on the new course without over-shooting the course by more than 10°.
9.2.B Emergency stop	Maneuver the ship	*Ship maneuvering and handling* Knowledge of the effects of wind and current on ship handling	On a ship at sea or in a simulator, proceeding at a speed of at least half ahead,	the candidate executes an emergency stop.	The candidate, within the safe operating limits of the vessel's propulsion system, stops the vessel using maximum astern thrust and rudder cycling without deviating from the original course by more than 20°.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
9.3.A Maneuver for a man overboard	Maneuver the ship	*Ship maneuvering and handling* Knowledge of maneuvers and procedures for the rescue of person overboard	On a ship at sea or in a simulator, upon receiving notification of a Man-Overboard (MOB),	the candidate immediately initiates either a Williamson Turn or Anderson Turn (as appropriate for conditions), returns the vessel to within sight of the MOB, and gives the command to launch the rescue boat.	The candidate: 1. Orders full rudder to the side of the MOB; 2. Sounds MOB signal if other vessels are in sight; 3. Simulates releasing the lighted buoy; 4. Marks the ship's position on ARPA/GPS (if fitted); 5. Simulates a "Mayday" call on VHF notifying any vessels in vicinity of the MOB; 6. Completes the recovery turn; 7. States the rescue boat would be prepared for launch or scrambling nets rigged on the side of the vessel; and 8. States that when on the reciprocal of the original course, the vessel would be slowed or stopped within 0.1 nm of the MOB to begin the recovery/search.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
9.4.A Knowledge of shallow water effects *Course*	Maneuver the ship	*Ship maneuvering and handling* Knowledge of squat, shallow water and similar effects	In an approved or accepted Basic Ship Handling course, when asked to describe squat, shallow water, and similar effects on a vessel's maneuvering capabilities,	the candidate describes (or selects the answer(s) that describe) squat, shallow water, and similar effects on a vessel's maneuvering capabilities.	The candidate describes: 1. Squat; 2. The cause of squat; 3. The change in squat as the vessel: a. Encounters shallow water; b. Changes speed; and c. Encounters an asymmetrical bottom; 4. The signs of squat, including: a. Changing wave pattern around ship; b. Vibration; c. Decreased speed; d. Trim changes; e. Loss of steerage; and f. Change in maneuvering characteristics; 5. Hazards due to squat, including: a. Grounding; and b. Loss of control; 6. Methods to compute squat; and 7. How to control squat.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
9.5.A Knowledge of anchoring and mooring *Course*	Maneuver the ship.	*Ship maneuvering and handling* Knowledge of proper procedures for anchoring and mooring	In an approved or accepted Basic Ship Handling course, when asked to describe proper procedures for anchoring and mooring,	the candidate describes (or selects the answer(s) that describe) proper procedures for anchoring and mooring.	The candidate's description (or the answer(s) selected) includes: 1. Planning: Determine the a. Depth of water; b. Type of bottom; c. Wind and current; d. Bottom obstructions; e. Room to swing; f. Place to anchor; g. Courses and maneuver to the anchor site; and h. Desired final heading; 2. Approach: Ensure that the ship does not pass to windward or up current of any anchored vessel or hazard to navigation; 3. Placement: a. Anchor site approached slowly; b. The ship's position is checked by natural landmarks and aids forming ranges ahead and abeam; c. The vessel is stopped when in position on the approximate desired final heading; and d. The anchor is correctly dropped for the depth of water; (*Continued on next page*)

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
9.5.A *(Continued)* Knowledge of anchoring and mooring *Course*					(*Continued from previous page*) 1. Laying out: a. The ship is backed slowly; and b. A length of chain 5 to 7 times the water depth is paid out slowly; and 2. Fetching up: a. The ship is allowed to fetch up on the chain; and b. The ship rides on a final heading that is within 40° of the desired final heading.
10.1.A Effect of cargo on seaworthiness and stability *Course*	Monitor the loading, stowage, securing, care during the voyage and the unloading of cargoes	*Cargo handling, stowage and securing* Knowledge of the effect of cargo, including heavy lifts, on the seaworthiness and stability of the ship	In an approved or accepted Basic Stability & Ship Construction course, when asked to describe the effect of cargo, including heavy lifts, on the seaworthiness and stability of the ship,	the candidate describes (or selects the answer(s) that describe) the effect of cargo, including heavy lifts, on the seaworthiness and stability of the ship.	The candidate describes (or selects the answer(s) that describes): 1. Cargo operations carried out in accordance with the cargo plan or other documents; and 2. Established safety rules/regulations, equipment operating instructions, and shipboard stowage limitations.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
10.2.A Safe handling, stowage and securing of cargoes *Course*	Monitor the loading, stowage, securing, care during the voyage and the unloading of cargoes	*Cargo handling, stowage and securing* Knowledge of safe handling, stowage and securing of cargoes, including dangerous, hazardous and harmful cargoes, and effect on the safety of life and the ship	In an approved or accepted Basic Cargo Handling & Stowage course, when asked to describe safe handling, stowage and securing of cargoes, including dangerous, hazardous and harmful cargoes, and their effect on the safety of life and of the ship,	the candidate describes (or selects the answer(s) that describe) safe handling, stowage and securing of cargoes, including dangerous, hazardous and harmful cargoes, and their effect on the safety of life and of the ship.	The candidate's description (or the answer(s) selected): 1. Includes the handling of dangerous, hazardous, and harmful cargoes; and 2. Complies with international regulations and recognized standards and codes of safe practice.
10.3.A Effective communications during loading and unloading *Course*	Monitor the loading, stowage, securing, care during the voyage and the unloading of cargoes.	*Cargo handling, stowage and securing* Ability to establish and maintain effective communications during loading and unloading	In an approved or accepted Basic Cargo Handling & Stowage course, when asked to describe how to establish and maintain effective communications during loading and unloading,	the candidate describes (or selects the answer(s) that describes) how to establish and maintain effective communications during loading and unloading.	The candidate describes (or selects the answer that describes) that communications must be clear, understood and consistently successful.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
11.1.A Inspection for damage and defects *Course*	Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks	Knowledge and ability to explain where to look for damage and defects most commonly encountered due to: .1 Loading and unloading operations .2 Corrosion .3 Severe weather conditions	In an approved or accepted Basic Cargo Handling & Stowage course, when asked to describe appropriate inspection procedures,	the candidate describes (or selects the answer that describes) appropriate inspection procedures.	The candidate's description (or the answers selected) includes where to look for damage and defects most commonly encountered due to: 1. Loading and unloading operations; 2. Corrosion; and 3. Severe weather conditions.
11.2.A Inspection scheduling and frequency *Course*	Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks	Ability to state which parts of the ship shall be inspected each time in order to cover all parts within a given period of time	In an approved or accepted Basic Cargo Handling & Stowage course, when asked to describe appropriate inspection procedures,	the candidate describes (or selects the answer that describes) appropriate inspection procedures.	The candidate's description (or the answers selected) includes which parts of the ship are inspected each time in order to cover all parts within a given period of time.
11.3.A Critical elements of ship structure *Course*	Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks	Identify those elements of the ship structure which are critical to the safety of the ship	In an approved or accepted Basic Stability & Ship Construction course, when asked to identify elements of the ship structure that are critical to the safety of the ship,	the candidate identifies (or selects the answer that identifies) elements of the ship structure that are critical to the safety of the ship.	The candidate's description (or the answers selected) correctly identifies elements of the ship structure that are critical to the safety of the ship.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
11.4.A Causes of corrosion in cargo spaces and ballast tanks *Course*	Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks	State the causes of corrosion in cargo spaces and ballast tanks and how corrosion can be identified and prevented	In an approved or accepted Basic Cargo Handling & Stowage course, when asked to describe the causes of corrosion in cargo spaces and ballast tanks and how corrosion can be identified and prevented,	the candidate describes (or selects the answer that describes) the causes of corrosion in cargo spaces and ballast tanks and how corrosion can be identified and prevented.	The candidate's description (or the answers selected) correctly describes the causes of and procedures for prevention of corrosion.
11.5.A Inspection procedures *Course*	Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks	Knowledge of procedures on how the inspections shall be carried out	In an approved or accepted Basic Cargo Handling & Stowage course, when asked to describe inspection procedures,	the candidate describes (or selects the answer that describes) inspection procedures.	The candidate's description (or the answers selected) correctly describes appropriate inspection procedures.
11.6.A Detection of defects and damages *Course*	Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks	Ability to explain how to ensure reliable detection of defects and damages	In an approved or accepted Basic Cargo Handling & Stowage course, when asked to appropriate inspection procedures,	the candidate describes (or selects the answer that describes) appropriate inspection procedures.	The candidate's description (or the answers selected) correctly describes appropriate inspection for reliable detection of defects and damages.
11.7.A Understanding of "enhanced survey programme" *Course*	Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks	Understanding of the purpose of the "enhanced survey programme"	In an approved or accepted Basic Cargo Handling & Stowage course, when asked to describe the "enhanced survey programme"	the candidate describes (or selects the answer that describes) the purpose of the "enhanced survey programme."	The candidate's description (or the answers selected) correctly describes the "enhanced survey programme."

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
12.1.A Precautions to prevent pollution of the marine environment	Ensure compliance with pollution prevention requirements	*Prevention of pollution of the marine environment and anti-pollution procedures* Knowledge of the precautions to be taken to prevent pollution of the marine environment	When asked by a qualified assessor to describe pollution prevention procedures,	the candidate describes appropriate pollution prevention procedures.	The candidate's description includes: 1. Procedures for monitoring shipboard operations and ensuring compliance with MARPOL requirements are fully observed; and 2. Actions to ensure that a positive environmental reputation is maintained.
12.2.A Anti-pollution procedures and associated equipment	Ensure compliance with pollution prevention requirements	*Prevention of pollution of the marine environment and anti-pollution procedures* Anti-pollution procedures and all associated equipment	When asked by a qualified assessor to identify and describe shipboard pollution prevention procedures and associated equipment,	the candidate describes appropriate pollution prevention procedures and equipment	The candidate's description includes identification of appropriate equipment and its use associated with: 1. Procedures for monitoring shipboard operations and ensuring compliance with MARPOL requirements are fully observed; and 2. Actions to ensure that a positive environmental reputation is maintained.
12.3.A Importance of proactive measures	Ensure compliance with pollution prevention requirements	*Prevention of pollution of the marine environment and anti-pollution procedures* Importance of proactive measures to protect the marine environment	When asked by a qualified assessor to describe compliance with pollution prevention procedures ,	the candidate describes appropriate pollution prevention procedures.	The candidate's description includes the importance of proactive measures to protect the marine environment.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
13.1.A Application of stability, trim and stress tables and diagrams *Course*	Maintain seaworthiness of the ship	*Ship stability* Working knowledge and application of stability, trim and stress tables, diagrams and stress calculating equipment	In an approved or accepted Basic Stability & Ship Construction course, when given stability, trim and stress tables, and diagrams,	the candidate determines stability data for vessel.	The candidate's stability conditions comply with the IMO intact stability criteria under all conditions of loading.
13.2.A Actions in event of partial loss of intact buoyancy *Course*	Maintain seaworthiness of the ship	*Ship stability* Understanding of fundamental actions to be taken in the event of partial loss of intact buoyancy	In an approved or accepted Basic Stability & Ship Construction course, when asked to describe actions to be for a partial loss of intact buoyancy,	the candidate describes (or selects the answer that describes) actions to be for a partial loss of intact buoyancy.	The candidate's actions to ensure and maintain the watertight integrity of the ship are in accordance with accepted practice.
13.3.A Fundamentals of watertight integrity *Course*	Maintain seaworthiness of the ship	*Ship stability* Understanding of the fundamentals of watertight integrity	In an approved or accepted Basic Stability & Ship Construction course, when asked to describe actions to ensure and maintain the watertight integrity of the ship,	the candidate describes (or selects the answer that describes) actions to ensure and maintain the watertight integrity of the ship.	The stability conditions comply with the IMO intact stability criteria under all conditions of loading. The candidate's actions to ensure and maintain the watertight integrity of the ship are in accordance with accepted practice.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
13.4.A Ship structure *Course*	Maintain seaworthiness of the ship	*Ship construction* General knowledge of the principal structural members of a ship and the proper names for the various parts	In an approved or accepted Basic Stability & Ship Construction course, when asked to describe principal structure members of a ship and the proper names for the various parts,	the candidate describes (or selects the answer that describes) principal structure members of a ship and the proper names for the various parts.	The candidate correctly identifies and describes the ship's structural members.
14.1.A *Course*	Prevent, control and fight fires on board	*Fire prevention and fire-fighting appliances* Ability to organize fire drills	This KUP is demonstrated by candidate successful completion of approved or accepted training in Basic and Advanced Firefighting.		
14.2.A *Course*	Prevent, control and fight fires on board	*Fire prevention and fire-fighting appliances* Knowledge of classes and chemistry of fire	This KUP is demonstrated by successful completion of approved or accepted training in Basic and Advanced Firefighting.		
14.3.A *Course*	Prevent, control and fight fires on board	*Fire prevention and fire-fighting appliances* Knowledge of fire-fighting systems	This KUP is demonstrated by successful completion of approved or accepted training in Basic and Advanced Firefighting.		
14.4.A *Course*	Prevent, control and fight fires on board	*Fire prevention and fire-fighting appliances* Knowledge of action to be taken in the event of fire, including fires involving oil systems	This KUP is demonstrated by successful completion of approved or accepted training in Basic and Advanced Firefighting.		

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
15.1.A *Course*	Operate life-saving appliances	*Life-saving* Ability to organize abandon ship drills and knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment, including radio life-saving appliances, satellite EPIRBs, SARTs, immersion suits and thermal protective aids	This KUP is demonstrated by successful completion of approved or accepted training for Proficiency in Survival Craft (and Rescue Boats, other than Fast Rescue Boats or Proficiency in Survival Craft and Rescue Boats, other than Lifeboats and Fast Rescue Boats or by holding an endorsement for PSC or PSC-Limited.		
16.1.A *Course*	Apply medical first aid on board ship	*Medical aid* Practical application of medical guides and advice by radio, including the ability to take effective action based on such knowledge in the case of accidents or illnesses that are likely to occur on board ship	This KUP is demonstrated by successful completion of an approved or accepted Medical First Aid Provider or Medical Care Provider course.		

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
17.1.A International Conventions	Monitor compliance with legislative requirements	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment	When asked by a qualified assessor,	the candidate describes legislative requirements relating to safety of life at sea, security and protection of the marine environment.	The candidate describes appropriate legislative requirements.
18.1.A Duties and responsibilities of shipboard personnel	Application of leadership and team working skills	Working knowledge of shipboard personnel management and training	On board ship or in an approved training program,	the candidate describes the basic duties and responsibilities of vessel personnel.	The candidate describes the duties and responsibilities of the following: 1. Master; 2. Deck department including: a. Chief Mate; b. Second Mate; c. Third Mate; d. Bosun e. Able Seamen; and f. Entry Level Deck; 3. Engine department including: a. Chief Engineer; b. First Assistant Engineer; c. Second Assistant Engineer; d. Third Assistant Engineer; e. QMEDs; and f. Entry Level Engine; and 4. Steward's department including: a. Chief Steward; b. Chief Cook; and c. Entry Level Steward's Department.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
18.2.A Maritime conventions and national legislation	Application of leadership and team working skills	A knowledge of related international maritime conventions and recommendations, and national legislation	On board ship or in an approved training program,	the candidate describes the basic international maritime conventions and national regulations.	The candidate describes the following: 1. International Convention for the Safety of Life at Sea (SOLAS); 2. International Ship and Port Facility Security Code (ISPS); 3. International Safety Management Code (ISM); 4. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended (STCW); 5. MARPOL 73/78 and its Annexes; 6. Oil Pollution Act of 1990 (OPA 90); 7. United States laws and regulations on inspection and manning of vessels; 8. United States laws and regulations on shipment and discharge of seamen; 9. U.S. Coast Guard chemical testing requirements (46 CFR Part 16); 10. Department of Transportation Hazardous Materials training requirements; and 11. Onboard contracts, including labor contracts.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
18.3.A Task and workload management	Application of leadership and team working skills	Ability to apply task and workload management, including: .1 planning and co-ordination .2 personnel assignment .3 time and resource constraints .4 prioritization	On board ship or in a full mission bridge simulator, during a pilot boarding operation as an OICNW under the direct supervision of the watch's assigned OICNW,	the candidate performs the duties of an OICNW.	The duties performed include: 1. Planning and scheduling the order of events in anticipation of the pilot boarding; 2. Giving or checking helm orders as per the Master's direction; 3. Operating signal devices (flags, signal lights, radio communications, etc.) as directed by the Master; and 4. Assigning and calling out personnel so that equipment is safely rigged and/or unrigged as needed.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
18.4.A Resource management	Application of leadership and team working skills	Knowledge and ability to apply effective resource management: .1 Allocation, assignment, and prioritization of resources .2 Effective communication onboard and ashore .3 Decisions reflect consideration of team experiences .4 Assertiveness and leadership, including motivation .5 Obtaining and maintaining situational awareness	On board a vessel,	the candidate supervises a mooring, unmooring, or anchoring operation on the ship's bow or stern, under the supervision of the normally assigned supervisor.	The candidate's satisfactorily performs the following duties: 1. Reviewing the overall plan with the Chief Mate or Master, as appropriate for the operation to be conducted; 2. Checking the assigned equipment to ensure that it is ready for use; 3. Briefing the assigned crewmembers on the group's assignment, visual, verbal and/or other signals that will be used and any special procedures or events that may concern them; 4. Delegating tasks to each of the assigned crewmembers, briefing them about any special procedures or events that may concern them; 5. Establishing and maintaining communications with bridge, team and shore personnel; 6. Showing situational awareness by noting to the supervisor items of importance such as the location of any tugs within the candidate's area of responsibility, potential hazards that each team member may encounter, equipment available; and 7. Actively managing the assigned crewmembers by walking around, motivating them to work safely and efficiently, and maintaining communications with all personnel involved while anticipating and mitigating any hazards.

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/1 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. In accordance with 46 CFR 11.301(a)(1)(i), alternative guidelines must be approved by the National Maritime Center before use.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
18.5.A Decision making techniques	Application of leadership and team working skills	Knowledge and ability to apply decision-making techniques: .1 Situation and risk assessment .2 Identify and consider generated options .3 Selecting course of action .4 Evaluation of outcome effectiveness	On board a vessel, during a fire or emergency simulation,	the candidate supervises a fire or emergency team under the supervision of the normally assigned supervisor.	The candidate: 1. Briefs the team on the situation, the approach to remedying the simulated emergency, and the procedures to be executed; 2. Delegates tasks to each of the assigned crewmembers, briefing them about any special procedures or events that may concern them; 3. Checks the assigned crewmembers to ensure that they are using personal protective equipment (PPE) correctly and appropriately; 4. Checks the assigned crewmembers to ensure that they have made available any equipment that will be needed to accomplish the assigned tasks, both team and individual; 5. Executes the generated plan to handle the emergency simulation; and 6. Participates in the post-simulation critique and presents the positive results of the simulation, the negative findings of the simulation, and makes recommendations to improve procedures, equipment availability, and personnel training.

Task No./Name	STCW Competence	Knowledge, Understanding. and Proficiency	Performance Condition	Performance Behavior	Performance Standard
19.1.A *Course*	Contribute to the safety of personnel and ship	Knowledge of personal survival techniques	This KUP is demonstrated by successful completion of approved or accepted Basic Training or presents evidence of maintaining the standards of competence in Basic Training.		
19.2.A *Course*	Contribute to the safety of personnel and ship	Knowledge of fire prevention and ability to fight and extinguish fires	This KUP is demonstrated by successful completion of approved or accepted Basic Training or presents evidence of maintaining the standards of competence in Basic Training.		
19.3.A *Course*	Contribute to the safety of personnel and ship	Knowledge of elementary first aid	This KUP is demonstrated by successful completion of approved or accepted Basic Training or presents evidence of maintaining the standards of competence in Basic Training.		
19.4.A *Course*	Contribute to the safety of personnel and ship	Knowledge of personal safety and social responsibilities	This KUP is demonstrated by successful completion of approved or accepted Basic Training or presents evidence of maintaining the standards of competence in Basic Training.		