Task No./Name	STCW Competence	STCW 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 vessel underway or on a simulator when ordered 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 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.		

Task No./Name	STCW Competence	STCW 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	STCW 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 a vessel or on a 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 Interpreting information from radar *Course*	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	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 their use.

Task No./Name	STCW Competence	STCW Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.5.A Set up and maintain an ARPA display *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.

Task No./Name	STCW Competence	STCW Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
3.6 Use of ARPA *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	This KUP is demonstrated if the candidate has successfully completed the ARPA course specified in 46 CFR 11.309(a)(4)(xiv).		
4.1 *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 *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.		

Task No./Name	STCW Competence	STCW Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.1 Search and Rescue *Course Note 1*	Co-ordinate search and rescue operations	A thorough knowledge of and ability to apply the procedures in the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual	This KUP is demonstrated by successful completion of the approved *Search and Rescue* course specified in 46 CFR 11.305(a)(3)(v) or 46 CFR 11.307(a)(3)(v).		
5.1 Operate ARPA Controls and functions *Course ARPA*	Maintain safe navigation through the use of information from navigation equipment and systems to assist command decision making	An appreciation of system errors and thorough understanding of the operational aspects of navigational systems Evaluation of navigational information derived from all sources, including radar and ARPA, in order to make and implement command decisions for collision avoidance and for directing the safe navigation of the ship	These KUPs are demonstrated by successful completion of the approved ARPA course specified in 46 CFR 11.305(a)(3)(vi) and 11.307(a)(3)(vi) or if the mariner holds an STCW endorsement as OICNW, Chief Mate, or Master that is valid for vessels equipped with ARPA.		

Task No./Name	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
4.1 **Search and Rescue** *Course*	Co-ordinate search and rescue operations	A thorough knowledge of and ability to apply the procedures in the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual	This KUP is demonstrated by successful completion of the approved *Search and Rescue* course specified in 46 CFR 11.311(a)(3)(v) and 11.313(a)(3)(v).		
5.1 Operate ARPA Controls and functions *Course ARPA*	Maintain safe navigation through the use of information from navigation equipment and systems to assist command decision making	An appreciation of system errors and understanding of operational aspects of navigational systems Evaluation of navigational information from all sources, including radar and ARPA, in order to make and implement command decisions for collision avoidance and for safe navigation of the ship	These KUPs are demonstrated by successful completion of the approved ARPA course specified in 46 CFR 11.311(a)(3)(viii) and 11.313(a)(3)(vi) or if the mariner holds an STCW endorsement as OICNW, Chief Mate, or Master that is valid for vessels equipped with ARPA.		

Task No./Name	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.2.A Blind pilotage planning	Maintain safe navigation through the use of information from navigation equipment and systems to assist command decision making	Blind pilotage planning Evaluation of navigational information derived from all sources, including radar and ARPA, in order to make and implement command decisions for collision avoidance and for directing the safe navigation of the ship	On a vessel, or in a navigational laboratory,	the candidate writes a standing order regarding navigation in restricted visibility.	The candidate's standing order includes: 1. Conditions constituting restricted visibility; 2. Informing the Master; 3. Traffic considerations; 4. Following the appropriate rules of the road; 5. Safe speeds; 6. Engineroom alert level (SBE, etc.); 7. Appropriate signals being used; 8. Posting of lookouts; 9. Operation and use of radar and other electronic surveillance devices available; and 10. Positioning of vessel in the seaway.

Task No./Name	STCW Competence	Knowledge, Understanding, and Proficiency	Performance Condition	Performance Behavior	Performance Standard
5.3.A Plan and execute a passage	Maintain safe navigation through the use of information from navigation equipment and systems to assist command decision making	The interrelationship and optimum use of all navigational data available for conducting navigation	On a vessel or on a simulator, using a radar and/or ARPA, with multiple targets displayed on the 12.0 mile range scale, in congested coastal waters with reduced visibility, while transiting a traffic separation scheme, in the presence of current, and with a least one course change of not less than 30° in the route,	the candidate plans and executes a passage through the area of transit, using the principles of bridge resource management (BRM).	The candidate's plan and passage includes: 1. Assigning BRM roles; 2. Monitoring the vessel's progress; 3. Communicating clearly and effectively; 4. Controlling passage for safe navigation and collision avoidance; and 5. Ensuring that all team members use all relevant navigational data.
6.1 ECDIS licensing and updating *Course ECDIS*	Maintain the safety of navigation through the use of ECDIS and associated navigation systems to assist command decision making	Management of operational procedures, system files and data, including manage the procurement, licensing and updating of chart data and system software to conform to established procedures	This KUP is demonstrated by successful completion of the approved ECDIS course specified in 46 CFR 11.311(a)(3)(vii) and 11.313(a)(3)(vii) or if the mariner holds any STCW endorsement as OICNW, Chief Mate, or Master that is valid for vessels equipped with ECDIS.		

Successful completion of these Assessment Guidelines will provide satisfactory evidence of meeting the standard of competence specified in Section A-II/2 of the STCW Code. Use of these Guidelines is not mandatory and 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 Assessment Guidelines must be approved by the National Maritime Center before use.