



Tips for Completing Assessments

Officer in Charge of Navigational Watch (OICNW)

- [Helpful Hints](#)
- [Control Sheets from Policy Letter 11-07](#)

Helpful Hints – OICNW

Assessments must be signed by **an officer that has met the qualification requirements of Section A-I/6**. Valid assessors must hold one of the following with a valid Standards for Training, Certification, and Watchkeeping (STCW):

- Master 500/1600 Ocean/Near Coastal
- Master Any Gross Tons Ocean/Near Coastal
- Master Offshore Supply Vessels Ocean/Domestic Near Coastal
- Chief Mate Ocean/Near Coastal
- Third Mate, Second Mate, Mate 500/1600, Mate OSV Ocean/Near Coastal *Note: Assessor must also have at least 1 year experience as OICNW on seagoing vessels of at least 200 Gross Registered Tonnage (GRT)/500 Gross Tons (GT)*
- Unlicensed National Oceanic and Atmospheric Administration (NOAA) Commissioned officers assigned to and serving on public vessels of NOAA in the capacity of Commanding Officer (CO) or Executive Officer (XO)
- Navy, Army, or Coast Guard Officers qualified as Officer of the Deck (OOD)

Please have the assessors PRINT and SIGN their name on each control sheet. They also need to include their mariner reference number.

If applying for a Near Coastal endorsement, applicants need **NOT** complete the following Celestial assessments:

- 1-1A
- 1-1B
- 1-1C
- 1-1D
- 1-1E
- 1-1F

Celestial assessments must be signed by an assessor holding an Oceans endorsement.

Since Automatic Radar Plotting Aids (ARPA) is optional, mariners may choose not to complete an ARPA course or the assessments and have their credential issued with a limitation.

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-1A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Celestial Navigation* -- Ability to use celestial bodies to determine the ship's position.

TASK: Adjust a sextant

PERFORMANCE CONDITION: On a ship underway, given a standard marine sextant with a perpendicularity error, side error, parallelism error, and collimation error, totaling no more than 2' and a clear horizon or sharply defined cloud.

PERFORMANCE BEHAVIOR: Remove the adjustable sextant errors

PERFORMANCE STANDARD:

1. The errors are removed in the following order:
 - a. Perpendicularity;
 - b. Side error;
 - c. Parallelism; and
 - d. Collimation error.
2. The index error is less than 0.5 minutes of arc as determined by the assessor.

Candidate

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Assessor

Position

Vessel or School

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Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-1B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Celestial Navigation* -- Ability to use celestial bodies to determine the ship's position

TASK: Measure the altitude of the sun

PERFORMANCE CONDITION: Aboard a ship at sea, given a standard marine sextant, a clear horizon, a visible sun, and an accurate time.

PERFORMANCE BEHAVIOR: Measure the altitude of the lower limb of the sun and accurately record the time of the observation.

PERFORMANCE STANDARD:

1. The altitude is within ± 0.5 minutes of arc, after correction for index error, as compared with the altitude measured by the assessor at the same time; and,
2. The time is within ± 2 second of UTC at the time of observation as determined by the assessor.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-1C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Celestial Navigation* -- Ability to use celestial bodies to determine the ship's position

TASK: Measure the altitude of at least 3 stars

PERFORMANCE CONDITION: Aboard a ship at sea, given a standard marine sextant, a clear horizon, a clear or partly cloudy sky, and an accurate time, during a single twilight.

PERFORMANCE BEHAVIOR: Measure the altitude of three stars and accurately record the times of the observation of each star.

PERFORMANCE STANDARD:

1. The altitude is within ± 0.5 minutes of arc, after correction for index error, compared with the assessor's solution; and,
2. The time is within ± 2 seconds of UTC of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-1D

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Celestial Navigation* -- Ability to use celestial bodies to determine the ship's position

TASK: Measure the altitude of the sun at meridian passage (local apparent noon)

PERFORMANCE CONDITION: Aboard a ship at sea, given a standard marine sextant, a clear horizon, a clear or partly cloudy sky.

PERFORMANCE BEHAVIOR: Measure the altitude of the sun as it transits the meridian on which the vessel is located.

PERFORMANCE STANDARD:

The altitude is within ± 0.5 minutes of arc, after correction for index error, of the assessor's solution measured at meridian passage.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-1E

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Celestial Navigation* -- Ability to use celestial bodies to determine the ship's position

TASK: Celestial running fix

PERFORMANCE CONDITION: Aboard a ship at sea, or in a navigation laboratory, when given the assumed positions, the intercepts, azimuths, times of three observations of the sun, and a standard plotting sheet appropriate for the dead reckoning position.

PERFORMANCE BEHAVIOR: Advance all three lines of position to a common time.

PERFORMANCE STANDARD:

The position of the running fix is within 1 nm of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-1F

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Celestial Navigation* -- Ability to use celestial bodies to determine the ship's position

TASK: Star fix

PERFORMANCE CONDITION: Aboard a ship at sea, or in a navigation laboratory, when given the assumed positions, the intercepts, azimuths, and times of three star observations, and on a standard plotting sheet appropriate for the dead reckoning position.

PERFORMANCE BEHAVIOR: Plot the three lines of position and advance them to a common time.

PERFORMANCE STANDARD:

The position of the star fix is within 1 nm of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-2A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Terrestrial and Coastal Navigation* --
Ability to determine the ship's position by use of: landmarks; and, aids to navigation,
including lighthouses, beacons and buoys

TASK: Fix by two bearings

PERFORMANCE CONDITION: On a ship underway, or a full mission ship 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.

PERFORMANCE BEHAVIOR: Determine the bearings of at least two charted objects and plot them.

PERFORMANCE STANDARD:

1. The position is within $\pm .1$ nm of the assessor's solution;
2. Crossing angles of bearings should be not less than 30° and not more than 160° between bearings;
3. The 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.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-2B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Terrestrial and Coastal Navigation* --
Ability to determine the ship's position by use of: Marine Radar

TASK: Fix by two ranges

PERFORMANCE CONDITION: On an operational marine radar or a radar simulator that meets applicable national and international performance standards, with land and buoys displayed, and given a chart with a scale of no more than 1: 150,000.

PERFORMANCE BEHAVIOR: Determine two or more ranges measured from identified charted objects or points of land and plot them.

PERFORMANCE STANDARD:

The position is within $\pm .1$ nm of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-2C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Terrestrial and Coastal Navigation* --
Ability to determine the ship's position by use of: Marine Radar

TASK: Fix by tangents to two identified objects

PERFORMANCE CONDITION: On an operational marine radar or a radar simulator that meets applicable national and international performance standards, with land and buoys displayed, and given a chart with a scale of no more than 1: 150,000.

PERFORMANCE BEHAVIOR: Determine two or more tangents measured from identified-charted objects or points of land and plot them.

PERFORMANCE STANDARD:

The position is within $\pm .1$ nm of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-2D

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Terrestrial and Coastal Navigation* --
Ability to determine the ship's position by use of: Dead Reckoning

TASK: Plot the ship's DR position

PERFORMANCE CONDITION: On a ship underway and using a standard plotting sheet or chart, and given the vessels speed made good and course made good for the past four hours.

PERFORMANCE BEHAVIOR: Plot the ship's DR position for every hour (or more frequently if required) for the duration of the watch.

PERFORMANCE STANDARD:

The position is within ± 1 nm of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-2E

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Terrestrial and Coastal Navigation* --
Ability to determine the ship's position by use of: Set and drift

TASK: Determine course to steer

PERFORMANCE CONDITION: On a ship underway, or a full mission ship 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.

PERFORMANCE BEHAVIOR: Plot the vessel's position on at least two successive occasions not less than 30 minutes apart, for a vessel steaming at 20 kts, and calculate set and drift by vector analysis and determine the course to steer to make the intended course.

PERFORMANCE STANDARD:

The course to steer is within $\pm 5^\circ$ of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-3A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Thorough knowledge of and ability to use navigational charts and publications, such as sailing directions, tide tables, notices to mariners, radio navigational warnings and ship's routing information.

TASK: Correction of charts and publications

PERFORMANCE CONDITION: On a ship, or in a navigational laboratory, given notices to mariners and uncorrected charts, and publications.

PERFORMANCE BEHAVIOR: Correct five charts and three publications, including the *Light List* or *List of Lights*.

PERFORMANCE STANDARD:

1. Charts and publications needing correction are identified;
2. Corrections are correctly made to the affected charts and publications;
3. All corrections are recorded on the chart and the chart correction record (or the chart correction spreadsheet); or for publications, on the correction page of the publication, and on the publication correction card or the publication correction spreadsheet.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-3B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Thorough knowledge of and ability to use navigational charts and publications, such as sailing directions, tide tables, notices to mariners, radio navigational warnings and ship's routing information

TASK: Chart selection

PERFORMANCE CONDITION: 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, given the appropriate chart catalog.

PERFORMANCE BEHAVIOR: Identify the charts needed for the voyage.

PERFORMANCE STANDARD:

1. The name and number of the charts are correctly identified and recorded.
2. The charts selected are the largest scales appropriate for the area being transited.
3. There is no gap in chart coverage for any portion of the voyage requiring coastal navigation and departure and arrival at any port.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-3C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Thorough knowledge of and ability to use navigational charts and publications, such as sailing directions, tide tables, notices to mariners, radio navigational warnings and ship's routing information

TASK: Route planning

PERFORMANCE CONDITION: On a ship, a full mission ship simulator, or in a navigation laboratory, when given three way points consisting of a position of departure, a position of arrival, and one other way point, with the total distance of more than 1,000 nm.

PERFORMANCE BEHAVIOR: Determine the appropriate courses and distances between way points and plot the intended courses on the charts selected.

PERFORMANCE STANDARD:

1. Courses and distances between waypoints were correctly calculated;
2. The route was the most direct; and
3. The courses were plotted on the appropriately scaled charts noting the ETA at each way point, including the final way point.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-4A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Electronic systems of position fixing and navigation* -- Ability to determine the ship's position by use of electronic navigational aids: GPS

TASK: Position fix by GPS

PERFORMANCE CONDITION: On a ship underway, or on a full-mission ship simulator, or in a navigation laboratory, using a GPS or DGPS receiver which meets IMO performance standards.

PERFORMANCE BEHAVIOR: Initialize a GPS or DGPS receiver, determine the ship's position and evaluate the accuracy of that position.

PERFORMANCE STANDARD:

1. The system was initialized; and
2. The accuracy of the position was determined.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-4B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Electronic systems of position fixing and navigation* -- Ability to determine the ship's position by use of electronic navigational aids: GPS

TASK: Use of GPS position save function

PERFORMANCE CONDITION: On a ship underway, or on a full-mission ship simulator, or in a navigation laboratory, using a GPS or DGPS receiver which meets IMO performance standards, when hearing "Man Overboard."

PERFORMANCE BEHAVIOR: Activate the man overboard/emergency position save function.

PERFORMANCE STANDARD:

The ship's position is saved or recorded within one minute of hearing "Man Overboard."

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-4D

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Echo Sounders* -- Ability to operate the equipment and apply the information correctly

TASK: Use of echo sounder

PERFORMANCE CONDITION: 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 that meets IMO performance standards.

PERFORMANCE BEHAVIOR: Turn on, test, and operate the echo sounder.

PERFORMANCE STANDARD:

1. The system was turned on;
2. The echo sounder was tested in accordance with manufacturer's recommendations;
3. The correct UTC is noted on the echo sounder paper (if fitted);
4. The scale selected was the lowest appropriate for the vessel's draft and the depth of water of the area of transit; and
5. The sensitivity was adjusted to obtain proper depth reading on the display and correct trace on the paper (if fitted).

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-5A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Magnetic & Gyro Compass* -- Ability to determine errors of the magnetic and gyro-compasses, using terrestrial means, and to allow for such errors

TASK: Determine gyro compass error by bearing of range

PERFORMANCE CONDITION: On a ship underway or a full mission ship simulator, using navigational or natural terrestrial ranges.

PERFORMANCE BEHAVIOR: Take a visual bearing of the range and determine gyro-compass error.

PERFORMANCE STANDARD:

1. The visual bearing is compared to the charted bearing;
2. The compass error is determined and properly labeled; and
3. The solution is $\pm .5^\circ$ of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-5B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Magnetic & Gyro Compass* -- Ability to determine errors of the magnetic and gyro-compasses, using terrestrial means, and to allow for such errors

TASK: Determine magnetic compass error

PERFORMANCE CONDITION: On a ship underway or a full mission ship simulator, with both a magnetic and gyrocompass.

PERFORMANCE BEHAVIOR: Determine the magnetic compass error.

PERFORMANCE STANDARD:

1. The magnetic heading is compared to the corrected gyro heading (corrected for a known gyro error);
2. The magnetic compass error is determined and properly labeled;
3. The solution is $\pm .5^\circ$ of the assessor's solution; and
4. The error is correctly recorded in the compass record book and the ship's log.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-5C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Magnetic & Gyro Compass* -- Ability to determine errors of the magnetic and gyro-compasses, using terrestrial means, and to allow for such errors

TASK: Determine magnetic compass deviation

PERFORMANCE CONDITION: On a ship underway or a full mission ship simulator, using navigational or natural terrestrial ranges, using only a magnetic compass, and a chart with variation.

PERFORMANCE BEHAVIOR: Note the vessel's magnetic compass heading while aligned on the range and determine magnetic compass deviation.

PERFORMANCE STANDARD:

1. The magnetic heading is compared to the charted range bearing;
2. The magnetic compass error is determined and properly labeled;
3. Variation is determined from the chart;
4. The deviation solution is $\pm .5^\circ$ of the assessor's solution; and
5. The deviation is correctly recorded in the compass record book and the ship's log.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-5D

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Magnetic & Gyro Compass* -- Ability to determine errors of the magnetic and gyro-compasses, using terrestrial means, and to allow for such errors

TASK: Determine course to steer by magnetic compass

PERFORMANCE CONDITION: On a ship underway or a full mission ship simulator, and given a deviation table.

PERFORMANCE BEHAVIOR: Apply the compass error to the course by magnetic compass to make good the intended true course.

PERFORMANCE STANDARD:

Compass error is correctly applied to the magnetic course and the candidate's solution is $\pm 1^\circ$ of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-5E

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Magnetic & Gyro Compass* -- Ability to determine errors of the magnetic and gyro-compasses, using terrestrial means, and to allow for such errors

TASK: Position fix by magnetic compass bearings

PERFORMANCE CONDITION: On a ship underway or on a full-mission ship simulator, or in a navigational laboratory, and given a deviation table, on a chart with a scale of no more than 1:150,000,

PERFORMANCE BEHAVIOR: Correctly apply the compass error to the bearings by magnetic compass of at least two charted objects and plot them on the chart in use..

PERFORMANCE STANDARD:

1. Compass error is correctly applied to the magnetic bearings; and
2. The object's position is determined within $\pm .5$ nm of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-5F

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Magnetic & Gyro Compass* -- Ability to determine errors of the magnetic and gyro-compasses, using terrestrial means, and to allow for such errors

TASK: Azimuth of the sun

PERFORMANCE CONDITION: On a ship underway, and using a standard azimuth circle.

PERFORMANCE BEHAVIOR: Read the gyrocompass bearing of the sun and determine gyro compass error.

PERFORMANCE STANDARD:

1. The azimuth of the sun is read when the repeater is level;
2. The time of the reading noted;
3. The true azimuth of the sun for the time of the reading is determined
4. The gyrocompass azimuth is compared to the true azimuth and the gyro error is determined;
and
5. The solution is $\pm .5^\circ$ of the assessor's solution.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-6A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Steering Control Systems* -- Adjustment of controls for optimum performance

TASK: Steering gear test

PERFORMANCE CONDITION: On a ship underway or a full mission ship simulator.

PERFORMANCE BEHAVIOR: Conduct the pre-departure test of the vessel's steering gear.

PERFORMANCE STANDARD:

1. The steering control system is turned on;
2. The steering gyro repeater is aligned with the master gyro-compass;
3. The controls for switching pumps and motors between the port and starboard steering systems are tested after the required warm up period; and
4. Both port and starboard steering systems are tested 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.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
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ASSESSMENT NO. OICNW-1-6B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Steering Control Systems* -- Adjustment of controls for optimum performance

TASK: Set weather controls

PERFORMANCE CONDITION: On a ship underway or a full mission ship simulator, while in auto-pilot.

PERFORMANCE BEHAVIOR: Set the rudder and weather controls that are most suitable for the weather and sea conditions.

PERFORMANCE STANDARD:

1. The weather control is set in accordance with the manufacturer's recommendations for the prevailing sea conditions;
2. The rudder control is set in accordance with the manufacturer's recommendations for the prevailing sea conditions for the area transited or simulated; and
3. The rate of turn control (if fitted) is set in accordance with the standing orders.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-7A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Meteorology* -- Ability to use and interpret information obtained from on-board meteorological instruments

TASK: Read barometric pressure

PERFORMANCE CONDITION: On a ship underway or in a laboratory.

PERFORMANCE BEHAVIOR: Determine the barometric pressure in millibars, inches or millimeters of mercury.

PERFORMANCE STANDARD:

1. The barometer is read and the appropriate corrections are applied; and
2. The barometric pressure determined by the candidate is within .5 millibars; .02 inches or .4 millimeters of the assessor's corrected reading.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-7B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Meteorology* -- Ability to use and interpret information obtained from on-board meteorological instruments

TASK: Determine true wind speed and direction

PERFORMANCE CONDITION: On a ship underway or in a laboratory, and using an anemometer.

PERFORMANCE BEHAVIOR: Determine true wind speed and direction.

PERFORMANCE STANDARD:

The apparent wind speed and direction is converted to true wind speed and direction and the candidate's solution is within one point for direction and five knots for speed of the assessor's solution.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-1-7C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Plan and conduct a passage and determine position

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Meteorology* -- Ability to use and interpret information obtained from on-board meteorological instruments

TASK: Determine expected weather conditions

PERFORMANCE CONDITION: On a ship underway or in a laboratory, and using the surface, upper air and sea state analysis weather maps

PERFORMANCE BEHAVIOR: Determine the weather to be encountered during the next 24-hour period.

PERFORMANCE STANDARD:

The candidate determines expected wind, sea, and weather conditions (types and amount of cloud cover, rain, and fog) based on standard meteorological principles and they agree with the assessor's determinations, based on the movement of the systems and fronts.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-1A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea

TASK: Identify light configurations

PERFORMANCE CONDITION: At night, on a ship underway, a full mission ship simulator, or using approved laboratory equipment.

PERFORMANCE BEHAVIOR: Identify vessels through observation of their light configurations.

PERFORMANCE STANDARD:

The candidate correctly identifies the situation or occupation of 18 of 20 vessels that have different light configurations.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-1B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea

TASK: Identify day shapes

PERFORMANCE CONDITION: In daylight, on a ship underway, a full mission ship simulator, or using approved laboratory equipment.

PERFORMANCE BEHAVIOR: Identify vessels through observation of their required shapes.

PERFORMANCE STANDARD:

The candidate correctly identifies the situation or occupation of 18 of 20 vessels that are displaying different required shapes.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-1C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea

TASK: Identify sound signals

PERFORMANCE CONDITION: In restricted visibility, on a ship underway, a full mission ship simulator, or using approved laboratory equipment.

PERFORMANCE BEHAVIOR: Identify vessels by hearing their required sound signals.

PERFORMANCE STANDARD:

The candidate correctly identifies the situation or occupation of 9 of 10 vessels sounding different required sound signals.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-1D

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea

TASK: Determine risk of collision

PERFORMANCE CONDITION: On a ship underway, a full mission ship simulator, or using approved laboratory equipment, and using a gyro-compass repeater and an azimuth circle, bearing circle, alidade, or other device for taking bearings, and a marine radar or ARPA meeting IMO performance standards set on the 12 mile scale and the targets more than 8 miles away.

PERFORMANCE BEHAVIOR: Determine if risk of collision exists with approaching meeting, crossing and overtaking vessels.

PERFORMANCE STANDARD:

1. Two visual bearings of an approaching vessel are taken using an azimuth circle, bearing circle or alidade to determine if the bearing to the approaching vessels is appreciably changing, and each observation is within $\pm 2^\circ$ of the assessor's solution; and
2. Two electronic bearings of an approaching vessel are taken on a radar or an ARPA to determine if the bearing to the approaching vessels are appreciably changing, and each observation is within $\pm 2^\circ$ of the assessor's solution.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-1E

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea

TASK: Maneuver to avoid risk of collision -- meeting

PERFORMANCE CONDITION: On a ship underway, a full mission ship simulator, or using approved laboratory equipment, when risk of collision with an approaching meeting vessel exists in good visibility in the open ocean.

PERFORMANCE BEHAVIOR: Apply the rules of the road correctly and maneuver the vessel to avoid the collision, if required.

PERFORMANCE STANDARD:

1. The aspect of the approaching vessel was determined;
2. The situation was identified as a meeting situation;
3. Positive action was taken in ample time in accordance with the steering and sailing rules to achieve a CPA of at least 3 nm; and
4. Speed or course changes were made that were large enough to be readily apparent to another vessel observing visually or by radar.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-1F

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea

TASK: Maneuver to avoid risk of collision -- overtaking

PERFORMANCE CONDITION: On a ship underway, a full mission ship simulator, or using approved laboratory equipment, when risk of collision with an approaching overtaking vessel exists in good visibility in the open ocean.

PERFORMANCE BEHAVIOR: Apply the rules of the road correctly and maneuver the vessel to avoid the collision, if required.

PERFORMANCE STANDARD:

1. The aspect of the approaching vessel was determined;
2. The situation was identified as an overtaking situation;
3. The candidate attempted to call the overtaking vessel on the VHF;
4. The danger signal was sounded, if required by the rules;
5. Positive action in ample time was taken in accordance with Rule 17 of the steering and sailing rules to achieve a CPA of at least 1 nm; and
6. Speed or course changes were made that were large enough to be readily apparent to another vessel observing visually or by radar.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-1G

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea

TASK: Maneuver to avoid risk of collision -- crossing

PERFORMANCE CONDITION: On a ship underway, a full mission ship simulator, or using approved laboratory equipment, when risk of collision with an approaching crossing vessel (from the candidate's starboard side at a relative bearing of between 30 degrees and 112.5 degrees) exists in good visibility in the open ocean.

PERFORMANCE BEHAVIOR: Apply the rules of the road correctly and maneuver the vessel to avoid the collision, if required.

PERFORMANCE STANDARD:

1. The aspect of the approaching vessel was determined;
2. The situation was identified as a crossing situation;
3. Positive action in ample time was taken in accordance with the steering and sailing rules to achieve a CPA of at least 3 nm; and
4. Speed or course changes were made that were large enough to be readily apparent to another vessel observing visually or by radar.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-2A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the principles to be observed in keeping a safe watch

TASK: Watch relief

PERFORMANCE CONDITION: On a ship underway or a full mission ship simulator during an exercise at sea.

PERFORMANCE BEHAVIOR: Properly relieve the watch in accordance with STCW Code Section A-VIII/2, Part 3-1, Paragraphs 21 and 22.

PERFORMANCE STANDARD:

1. The standing orders and night orders were read;
2. The vessel's position, course and speed are read from the GPS receiver and compared to the DR position and track;
3. The position of the next charted waypoint is compared to the GPS waypoint and the route print out;
4. The identity of critical aids to navigation in sight is verified;
5. Tides and currents are determined as necessary;
6. Visibility and weather are determined;
7. The radar or ARPA is checked and is properly tuned;
8. Any targets displayed on the radar or ARPA are checked;
9. Headings by magnetic and gyrocompass are checked;
10. The navigational hazards likely to be encountered during the watch are determined;
11. The possible effects of list, trim, water density and squat on under keel clearance are determined;
12. Courses, traffic, weather and any special instructions were related by the officer being relieved; and
13. The relieving officer told the officer being relieved he or she was relieved.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-2B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the principles to be observed in keeping a safe watch

TASK: Keep a safe navigation watch

PERFORMANCE CONDITION: On a ship underway or a full mission ship simulator during an exercise at sea.

PERFORMANCE BEHAVIOR: Properly keep a safe navigational watch in accordance with STCW Code Section A-VIII/2, Part 3-1, Paragraph 23 to 50.

PERFORMANCE STANDARD:

1. The voyage plan was closely and continuously monitored;
2. A proper look out was maintained by all available means;
3. A safe speed was maintained throughout the watch period;
4. Position, course and speed were checked at frequent intervals;
5. The steering mode selected was appropriate to the area being transited;
6. Ensures that under keel clearance was suitable for the draft of the vessel at all times;
7. Course changes were made in accordance with the voyage plan;
8. The vessel's position was fixed and plotted on an appropriate chart at intervals suitable to the vessel's speed and the area being transited;
9. The identity of critical aids to navigation in sight is 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 was frequently checked to verify it is functioning properly;
12. The risk or danger of collision with each approaching vessel is determined and early and substantial action is taken in accordance with the COLREGS to avoid collisions;
13. Rudder and engine orders were executed as ordered;
14. The validity of the gyro input to all navigation equipment is verified;
15. Gyrocompass error was determined by any available means and the error was logged;
16. Magnetic variation and compass deviation were correctly applied to courses and bearings;
17. The candidate determined the person steering the vessel was competent to do so;
18. Tide and current conditions for the watch period were determined in coastal or tidal waters;
19. Set and drift were determined and applied to allow for set and drift;
20. The weather conditions at the ship were correctly and timely recorded and reported as required;
21. Running lights were checked throughout the watch period;
22. The master was notified as directed by all master's or standing orders;
23. All required log entries were made; and
24. All relevant navigation information was used to identify protected marine habitats, areas, and sanctuaries

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Candidate	Candidate's Mariner Reference No.
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Assessor	Position
<hr/>	<hr/>
Vessel or School	Assessor's Mariner Reference No. Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-2C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the principles to be observed in keeping a safe watch

TASK: Notify Master when appropriate

PERFORMANCE CONDITION: On a ship underway or a full mission ship simulator during an exercise at sea.

PERFORMANCE BEHAVIOR: Notify the master as instructed, and when in doubt of other vessels' 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.

PERFORMANCE STANDARD:

The master was notified immediately when one of the following occurred.

1. Restricted visibility was encountered or expected;
2. Vessel traffic density or the movements of other ships caused concern;
3. Difficulty was experienced in maintaining course;
4. Failed to sight land or a navigational mark, or to obtain soundings when expected;
5. Aids to navigation were not in position or were displaying incorrect characteristics;
6. Land or a navigational mark was unexpectedly sighted, or soundings obtained or changed unexpectedly;
7. The engines or its control systems, steering, or any essential navigational equipment failed, or alarms or indicators for these systems sounded;
8. Failure of any radio equipment;
9. Concerns arose in heavy weather about damage to the vessel or its cargo;
10. Any hazard to navigation that posed a threat to the vessel was noticed;
11. Any doubt about the ship's safety or other emergency arose; or
12. Any changes are made to the voyage plan.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-2D

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the principles to be observed in keeping a safe watch

TASK: Keep a safe anchor watch

PERFORMANCE CONDITION: On a ship at anchor or a full mission ship simulator during an exercise at anchor with wind and seas building.

PERFORMANCE BEHAVIOR: Properly keep a safe anchor watch in accordance with STCW Code Section A-VIII/2, Part 3-1, Paragraph 51.

PERFORMANCE STANDARD:

1. Determined and plotted the ship's position;
2. Frequently checked the ship's position by visual and radar bearings and radar ranges from the same charted objects;
3. Established the GPS or DGPS anchor alarm;
4. Maintained a proper lookout;
5. Ensured periodic inspections were made;
6. Posted a rating at the anchor to carry out orders with respect to the anchor;
7. Monitored weather, tides and sea state;
8. Notified the master immediately when the weather changed, visibility became restricted, or the anchor started to drag;
9. Placed engines on standby and ensured that they are ready for immediate use where appropriate; and
10. Properly displayed all required lights and shapes and sounded proper sound signals.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-2E

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the principles to be observed in keeping a safe watch

TASK: Navigate in restricted visibility

PERFORMANCE CONDITION: On a ship at sea or a full mission ship simulator during an exercise at sea, when visibility becomes restricted while underway.

PERFORMANCE BEHAVIOR: Recognize the restricted visibility take the appropriate action to navigate in restricted visibility in accordance with the COLREGS in accordance with Section STCW Code A-VIII/2, Part 3-1, Paragraph 45.

PERFORMANCE STANDARD:

1. The restricted visibility was determined;
2. The master was notified;
3. Steering was switched to hand steering;
4. A proper lookout was posted and the running lights turned on;
5. The vessel's speed was set in accordance with Rule 6;
6. Sounding of required signals was commenced;
7. The radar or ARPA was set on the appropriate scale to scan at long range for the presence of other vessels; and
8. Approaching targets were plotted or the ARPA or radar was used to obtain early warning of risk of collision and determine the speed and direction of relative motion.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-2F

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of the principles to be observed in keeping a safe watch

TASK: Turn over a watch

PERFORMANCE CONDITION: On a ship at sea or a full mission ship simulator during an exercise at sea.

PERFORMANCE BEHAVIOR: Turn the watch over.

PERFORMANCE STANDARD:

1. A DR position was plotted on the chart in use for the end of the watch;
2. The ship's position was determined and plotted all by means appropriate to the area transited;
3. Required weather data was read and recorded in the deck log;
4. The heading of the gyro and magnetic compasses were compared and recorded;
5. The movement of all vessel traffic was checked by both visual and electronic means immediately before being relieved;
6. The vessel's course and speed, posting of special lookouts, the steering mode in use, and weather and visibility were relayed to the relieving officer;
7. Any special instructions regarding occurrences during the past watch or which are expected during the next watch were relayed;
8. All relevant information concerning vessels in sight or on the radar or ARPA was reported to the relieving officer;
9. The master is notified of any doubt that the relieving officer is competent to perform his or her duties;
10. The watch was not turned over during a maneuver or other action to avoid a hazard to navigation; and
11. The officer being relieved did not leave the bridge until informed by the relieving officer that he or she is ready to take the watch.

Candidate	Candidate's Mariner Reference No.
Assessor	Position
Vessel or School	Assessor's Mariner Reference No. Date

TABLE A-II/1 Specification of Minimum Standard of Competence OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

ASSESSMENT NO. OICNW-2-3A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of effective bridge teamwork procedures

TASK: Voyage planning

PERFORMANCE CONDITION: On a ship, a full mission ship simulator, or in a navigation laboratory, when given a port of departure and a port of arrival more than 1,000 apart.

PERFORMANCE BEHAVIOR: Plan a voyage and review the voyage plan with the master and deck officers.

PERFORMANCE STANDARD:

Appraisal -- Take into account paragraph 2 of the annex to IMO Assembly Resolution A 893(21):

1. The condition of the vessel, its stability, equipment, operational limitations, draft and maneuvering characteristics;
2. Any special characteristics of the cargo and its stowage;
3. Crew members competency and rest status;
4. The status of all ship's certificates and documents were up to date;
5. Up to date charts of proper scale, and the latest notices to mariners and radio navigational warnings;
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.

Planning -- Plan contains the following per para. 3 of the annex to IMO Assembly Resolution A 893(21):

15. Courses plotted on the appropriately scaled charts noting the ETA at each way point, including the final way point;
16. Courses and distances between way points were correctly calculated and indicated on the charts;
17. The most direct route that avoided all hazards to navigation by the margin of safety of 3 nm;
18. The areas of all required speed changes;
19. The minimum under keel clearances in critical areas; positions requiring a change of machinery status;
20. Positions requiring a change of machinery status;
21. Waypoint of all course changes;
22. The methods and frequency of position fixing, including areas requiring the highest accuracy;
23. The positions and radio hailing frequencies or channels where port authorities, pilots and VTS services must be notified were noted on the relevant chart;
24. The state of the tide and currents at the port of departure for the times of departure and transit were determined;
25. Contingency plan for alternative actions in cases of emergency;
26. The review of the voyage plan with the Master and deck officers.
27. All relevant navigation information used to identify protected marine habitats, areas and sanctuaries.

Candidate	Candidate's Mariner Reference No.
Assessor	Position
Vessel or School	Assessor's Mariner Reference No. Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-3B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of effective bridge teamwork procedures

TASK: Execute a voyage plan

PERFORMANCE CONDITION: On a ship, or a full mission ship simulator, when given a voyage plan.

PERFORMANCE BEHAVIOR: Execute the voyage plan.

PERFORMANCE STANDARD:

The candidate, in accordance with paragraph 4 and 5 of the annex to IMO Assembly Resolution A 893(21):

1. Checks the reliability and condition of the navigational equipment at frequent intervals;
2. Applies basic information obtained from the tide tables and other navigational publications to determine under keel clearance;
3. Fixes the vessels position at appropriate intervals;
4. Checks magnetic and gyro-compasses;
5. Assesses meteorological information;
6. Determined compass error;
7. Calculates sailings for up to 24 hours;
8. Correctly operates and applied information from electronic navigation systems;
9. Correctly operates the radar and ARPA and applied the information for navigation and collision avoidance;
10. Correctly operates propulsion and steering systems to control heading and speed;
11. Initiates action in event of a real or simulated equipment malfunction or failure of major items of equipment;
12. Correctly conducts radio-communications;
13. Monitored and correctly operates safety and alarm systems.
14. Closely and continuously monitors the voyage plan.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-3C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of effective bridge teamwork procedures

TASK: BRM – Recognition of watch condition

PERFORMANCE CONDITION: On a ship at sea or a full mission ship simulator during an exercise at sea, when help is needed because of restricted visibility, vessel traffic or safety of navigation.

PERFORMANCE BEHAVIOR: Recognize the need for additional personnel on the bridge and notify the master.

PERFORMANCE STANDARD:

The candidate notifies the master immediately if:

1. The 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. the vessel will transit restricted waters with vessel traffic; or
4. he or she was fatigued to the point that decision making is affected.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-3D

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of effective bridge teamwork procedures

TASK: BRM Condition III – collision avoidance.

PERFORMANCE CONDITION: the ship is navigating near land, shoals or with increased traffic density and/or restricted visibility. This condition requires concentrated navigation and observation of traffic for collision avoidance (entering or leaving port).

On a ship at sea or a full mission ship 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 traffic using an IMO compliant ARPA. The ship is navigating near land, shoals, or with increased traffic density and/or restricted visibility.

PERFORMANCE BEHAVIOR: Identify all vessels (targets) posing a risk or danger of collision, and provide appropriate information and recommendations on vessel traffic and any other situation or condition that may effect the safe navigation of the vessel to the conning officer.

PERFORMANCE STANDARD:

1. The risk and danger of collision of all approaching vessels is determined within 6 minutes;
2. The conning officer was immediately notified of the relative position of the threatening vessel, its CPA and TCPA;
3. Course changes in accordance with the COLREGS to remove the risks of collision and avoid the close quarters situations from developing were recommended;
4. All recommended course or speed changes resulted in increasing the CPA to approaching vessels identified as posing a risk or danger of collision;
5. All recommended course changes provided sufficient sea room and bottom clearance for the area transited;
6. Communication was clear, immediate, reliable and relevant; and
7. Non-essential activities were avoided.

<hr/> <p>Candidate</p>	<hr/> <p>Candidate's Mariner Reference No.</p>
<hr/> <p>Assessor</p>	<hr/> <p>Position</p>
<hr/> <p>Vessel or School</p>	<hr/> <p>Assessor's Mariner Reference No.</p>
	<hr/> <p>Date</p>

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-3E

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of effective bridge teamwork procedures

TASK: BRM Condition III – navigation

PERFORMANCE CONDITION: On a ship at sea or a full mission ship 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 the vessel's position, communicate on the VHF, and all other bridge duties, using an IMO compliant ARPA, a GPS or DGPS receiver and all other bridge navigational equipment identified in the performance standard.

PERFORMANCE BEHAVIOR: Determine and plot the vessel's position by electronic and visual means, communicate as required on the VHF, and carry out all engine commands, ensure that all rudder commands are properly carried out, and make all appropriate log book entries.

PERFORMANCE STANDARD:

1. Visual and electronic means were used to determine the ship's position, including GPS or DGPS, radar, ARPA, ECDIS (if fitted), and Echo Sounder;
2. The vessel's position was plotted in accordance with tolerances stated previously at regular intervals appropriate to the vessel's speed and the area transited;
3. The correct courses to steer to maintain the ship on the intended track were determined and recommended to the conning officer;
4. All VHF calls to own ship were answered and calls to other ships in the area and port authorities were made as required;
5. The helmsman was monitored to ensure all rudder commands were carried out;
6. Communication was clear, immediate, reliable and relevant;
7. Non-essential activities were avoided; and
8. All required entries in the appropriate vessel's logs were made.

Candidate	Candidate's Mariner Reference No.
Assessor	Position
Vessel or School	Assessor's Mariner Reference No. Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-3F

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of effective bridge teamwork procedures

TASK: BRM Condition II or III – error trapping

PERFORMANCE CONDITION: The ship is underway offshore in restricted visibility, with increased traffic, land or shoals affecting navigation (coastwise navigation).

On a ship at sea or a full mission ship 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;
3. a navigational aid is misidentified;
4. the vessel's position is improperly fixed; or
5. a target vessel's movements are improperly stated.

PERFORMANCE BEHAVIOR: Monitor vessel's movement, recognize erroneously stated information about the vessel's position or a target vessels movement, and notify the conning officer of specific questions regarding the vessel's situation.

PERFORMANCE STANDARD:

1. The misinformation or command error was detected.
2. The conning officer was notified within 30 seconds of the occurrence of the error (for helm orders, the candidate will detect the error and issue a corrective order within 5 seconds).

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-3G

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of effective bridge teamwork procedures

TASK: BRM Condition II – navigation & collision avoidance

PERFORMANCE CONDITION: On a ship at sea or a full mission ship simulator during an exercise at sea, when acting as part of the bridge team with assigned duties to monitor the vessel's navigation and determine the risk or danger of collision with all vessels underway in open sea, using an ARPA meeting all national and international performance requirements, a GPS or DGPS receiver and all the bridge equipment identified in the performance standard.

PERFORMANCE BEHAVIOR: Determine and plot the vessel's position at suitable intervals, and plot or systematically observe all approaching vessels and inform the bride team of dangers to navigation, intended course changes, and vessels which pose a risk or danger of collision.

PERFORMANCE STANDARD:

1. The vessel's position was determined and plotted at suitable intervals;
2. All aids to navigation were identified;
3. The bridge team was notified immediately of the following:
 - a) when planned course changes must be made;
 - b) effects of tides or currents setting the vessel off its intended course: or,
 - c) any doubt about the vessel's position.
4. The risk and danger of collision with approaching vessels in the vicinity were determined by visual and radar/ARPA bearings.
5. The bridge team was notified of the following:
 - a) danger or risk of collision 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 for immediate use.

Candidate	Candidate's Mariner Reference No.	
Assessor	Position	
Vessel or School	Assessor's Mariner Reference No.	Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-3H

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of effective bridge teamwork procedures

TASK: BRM Condition III – establish a bridge team

PERFORMANCE CONDITION: On a ship at sea or a full mission ship 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.

PERFORMANCE BEHAVIOR: Determine the number of officers required safely navigating the vessel and assign individual officers and crewmembers specific duties and functions as part of the bridge team.

PERFORMANCE STANDARD:

Officers were assigned to the following tasks:

1. Conning;
2. Lookout
3. Collision avoidance; and
4. Navigation;
5. Communication; and,
6. Administration.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-2-3I

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maintain a safe navigational watch

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Watchkeeping* -- Thorough knowledge of effective bridge teamwork procedures

TASK: BRM Condition II or III – Prioritization

PERFORMANCE CONDITION: On a full-mission ship simulator during an exercise at sea, and with a bridge team in place, while navigating in congested near- coastal waters in good visibility, and assigned duties as an officer in a bridge team, 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.

PERFORMANCE BEHAVIOR: Determine the appropriate action to take..

PERFORMANCE STANDARD:

The candidate:

1. assesses the situation;
2. determines in 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. after the danger of collision is over, acknowledges the distress call.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- Ability to operate and to interpret and analyze information obtained from radar, including: Performance -- setting up and maintaining displays

TASK: Set up and maintain radar display

PERFORMANCE CONDITION: On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards.

PERFORMANCE BEHAVIOR: Set up and maintain the radar display.

PERFORMANCE STANDARD:

Within three minutes, after the power is turned on:

1. The set is switched from standby to transmit;
2. The appropriate scale is selected;
3. The gain control was adjusted so that targets and sea return appear;
4. The tune control is adjusted (if the unit is not self tuning);
5. The brilliance control is adjusted;
6. The sea clutter and rain clutter controls are adjusted to suppress the rain and sea clutter without losing targets;
7. The north-up stabilized relative motion is selected.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- Ability to operate and to interpret and analyze information obtained from radar, including: Performance -- setting up and maintaining displays

TASK: Switch display modes

PERFORMANCE CONDITION: On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards.

PERFORMANCE BEHAVIOR: Switch the display from north-up stabilized relative motion to true motion to head-up, and state how to recognize the mode displayed.

PERFORMANCE STANDARD:

Within 15 seconds:

1. The display is switched from north-up stabilized relative motion to true motion;
2. The display is switched from true motion to head-up; and
3. The candidate pointed to the location on the display of the information that indicates the mode displayed.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- Ability to operate and to interpret and analyze information obtained from radar, including: Performance -- detection of misrepresentation of information, false echoes, sea return, etc., racons and SARTs

TASK: Identify false echoes, sea return, racon and SART

PERFORMANCE CONDITION: On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards.

PERFORMANCE BEHAVIOR: Identify false echoes, sea return, a racon and SART.

PERFORMANCE STANDARD:

The following were recognized and correctly identified:

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.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1D

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- Ability to operate and to interpret and analyze information obtained from radar, including: Use -- range and bearing, course and speed of other ships; time and distance of crossing, meeting, and overtaking ships

TASK: Determine range and bearing

PERFORMANCE CONDITION: On an operational radar or radar simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with land and aids to navigation in range.

PERFORMANCE BEHAVIOR: Determine the range and bearing to an object.

PERFORMANCE STANDARD:

1. The candidate determined the range and bearing to an object selected by the assessor within 30 seconds.
2. The candidate's:
 - a) range was within ± 0.1 nm of the assessor's solution or $\pm 1\%$ of the range scale in use.
 - b) bearing is within $\pm 1^\circ$ of the assessor's solution.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1E

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- Identification of critical echoes; detecting course and speed changes of to other ships; effective changes of own ship's course and speed

TASK: Determine risk of collision

PERFORMANCE CONDITION: 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.

PERFORMANCE BEHAVIOR: Determine if risk of collision or danger of collision exists with all approaching vessels.

PERFORMANCE STANDARD:

The candidate identified:

1. All approaching vessels whose bearing did not change appreciably; and
2. All vessels that had a CPA of less than 3 miles; and
3. All determinations were made within 8 minutes of determining the initial range and bearing of each vessel.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1F

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- Identification of critical echoes; detecting course and speed changes of to other ships; effective changes of own ship's course and speed

TASK: Determine DRM, SRM, CPA, and TCPA

PERFORMANCE CONDITION: 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.

PERFORMANCE BEHAVIOR: Determine:

1. The range and bearing to 3 other ships (meeting, crossing, and overtaking);
2. The DRM and SRM of all other ships; and
3. The CPA and TCPA of all vessels.

PERFORMANCE STANDARD:

1. The range and bearing solution are completed within 30 seconds and are within the previously stated tolerances;
2. The DRM solution is completed within 6 minutes and is within $\pm 5^\circ$ of the assessor's solution;
3. The SRM solution is completed within 7 minutes of initial range and bearing and is within ± 2 knot of the assessor's solution;
4. The CPA solution is completed within 7 minutes and is within ± 0.5 miles of the assessor's solution; and
5. The TCPA solution is completed within 8 minutes and is within ± 3 minutes.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1G

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- Identification of critical echoes; detecting course and speed changes of to other ships; effective changes of own ship's course and speed

TASK: Detect speed and course changes of other ships

PERFORMANCE CONDITION: 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.

PERFORMANCE BEHAVIOR: Detect speed and course changes of other ships which result in a change in the direction or speed of relative motion.

PERFORMANCE STANDARD:

Other ships' speed changes of at least 5 knots and/or course changes of at least 10° were detected within 10 rotations of the sweep (30 seconds) from the time the candidate began his or her systematic observation of the display.

Candidate	Candidate's Mariner Reference No.
Assessor	Position
Vessel or School	Assessor's Mariner Reference No. Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1H

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- Identification of critical echoes; detecting course and speed changes of to other ships; effective changes of own ship's course and speed; and, application of International Regulations for Preventing Collisions at Sea

TASK: Change course to control target DRM

PERFORMANCE CONDITION: 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 north-up stabilized relative motion mode, with a ship on the starboard bow with a CPA of 0.5.

PERFORMANCE BEHAVIOR: Control the target vessels DRM by changing own ship's course in accordance with the COLREGS.

PERFORMANCE STANDARD:

1. Determined the new course to steer to achieve a 2 mile CPA;
2. Executed a turn to starboard; and
3. Achieved a CPA of not less than 1.8 nm or more than 2.2 nm.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-11

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- Identification of critical echoes; detecting course and speed changes of to other ships; effective changes of own ship's course and speed; and, application of International Regulations for Preventing Collisions at Sea

TASK: Change speed to control target DRM

PERFORMANCE CONDITION: 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 north-up stabilized relative motion mode, with a vessel on the beam with a CPA of less than 0.5 NM ahead.

PERFORMANCE BEHAVIOR: Control the target vessels DRM by changing own ship's speed in accordance with the COLREGS.

PERFORMANCE STANDARD:

1. Determined the new speed to achieve a 2 mile CPA;
2. Executed a speed reduction; and
3. Achieved a CPA of not less than 1.8nm or more than 2.2 nm.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1J

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- plotting techniques and relative and true motion concepts

TASK: Determine true course and speed of target vessels

PERFORMANCE CONDITION: 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 relative motion north-up mode, using any graphically correct method.

PERFORMANCE BEHAVIOR: Determine the true course and speed of three target vessels.

PERFORMANCE STANDARD:

1. Constructed a relative motion triangle on either a reflection plotter, a maneuvering board, or a transfer plotting sheet; and
2. Solved for the target vessel's true course and speed within 8 minutes; and
3. The candidate's true course solution is within $\pm 5^\circ$ and the true speed solution is within ± 5 knots of the assessor's solution.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1K

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- parallel indexing

TASK: Parallel indexing

PERFORMANCE CONDITION: 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 relative motion north-up mode, with aids to navigation and a coastline displayed on the display.

PERFORMANCE BEHAVIOR: Use a parallel index line to monitor and maintain the vessel on track.

PERFORMANCE STANDARD:

1. Constructed a parallel index line through the edge of the known hazard to navigation or land mass; and
2. Monitored the vessel's movement in relation by referring to the relative motion of the parallel index in relation to the land mass;
3. The vessel must not drift more than 10 % of the set distance toward the known hazard or landmass.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-1L

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Radar Navigation* -- parallel indexing

TASK: Determine DRM, SRM, CPA and TCPA

PERFORMANCE CONDITION: 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 true motion mode, using any graphically correct method.

PERFORMANCE BEHAVIOR: Determine the DRM, SRM, CPA and TCPA of three target vessels.

PERFORMANCE STANDARD:

The candidate:

1. constructs a relative motion triangle on either a reflection plotter, a maneuvering board or a transfer plotting sheet;
2. obtains a DRM solution within 8 minutes and within $\pm 5^\circ$ of the assessor's solution;
3. obtains a SRM solution within 8 minutes of initial range and within ± 2 knots of the assessor's solution;
4. obtains a CPA solution within 7 minutes and within ± 0.5 nm of the assessor's solution;
and
5. obtains a TCPA solution within 8 minutes and within ± 3 minutes of the assessor's solution

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA
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 use of operational warnings and system tests

TASK: Set up and maintain an ARPA display

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA).

PERFORMANCE BEHAVIOR: Set up and maintain the ARPA display.

PERFORMANCE STANDARD:

Within three minutes, the candidate:

1. Turns the power on;
2. Initializes performance monitor;
3. Notes error messages;
4. Switches from standby to on;
5. Selected the appropriate scale;
6. Adjusts the gain control so that targets and sea return appeared;
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 controls 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.
12. Selects sea-stabilized mode.

Candidate	Candidate's Mariner Reference No.
Assessor	Position
Vessel or School	Assessor's Mariner Reference No. Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA

Ability to operate and to interpret and analyze information obtained from ARPA, including: methods of target acquisition and their limitations

TASK: Manual target acquisition

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with at least 10 targets on the selected range.

PERFORMANCE BEHAVIOR: Manually acquire ten targets.

PERFORMANCE STANDARD:

Manually acquire 10 targets within 2 minutes.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA
Ability to operate and to interpret and analyze information obtained from ARPA, including: methods of target acquisition and their limitations

TASK: Establish an exclusion area

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale, and in automatic acquisition.

PERFORMANCE BEHAVIOR: Establish an exclusion area that suppresses the automatic acquisition of targets in that area.

PERFORMANCE STANDARD:

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 four nm from the vessel.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2D

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA

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

TASK: Set vector characteristics

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale.

PERFORMANCE BEHAVIOR: Switch between true and relative vectors and change the length of the vectors from 6 minutes to 30 minutes.

PERFORMANCE STANDARD:

Switches between true and relative vectors and changes the length of the vectors within 10 seconds.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2E

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA

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

TASK: Designate targets

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale.

PERFORMANCE BEHAVIOR: Designate two acquired targets.

PERFORMANCE STANDARD:

Designate two of the acquired targets for an alphanumeric display of the target information within 10 seconds for each target.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2F

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA

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

TASK: Cancel targets

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale.

PERFORMANCE BEHAVIOR: Cancel a single target.

PERFORMANCE STANDARD:

A single target is cancelled within 5 seconds.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2G

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA
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

TASK: Target history

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale.

PERFORMANCE BEHAVIOR: Demonstrate the ability to display a target's history.

PERFORMANCE STANDARD:

1. Correctly operate the controls that display a target's history; and
2. The target's history is displayed within 10 seconds.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2H

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA
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

TASK: Establish CPA and TCPA

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale.

PERFORMANCE BEHAVIOR: Establish the CPA and TCPA for dangerous targets.

PERFORMANCE STANDARD:

1. The candidate determines the parameters for dangerous targets by entering:
 - a. minimum CPA; and
 - b. minimum TCPA.
2. Data entry must be completed within 1 minute.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2I

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA
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

TASK: Establish alarm area

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale.

PERFORMANCE BEHAVIOR: Establish an alarm area with outer and inner guard rings.

PERFORMANCE STANDARD:

Establish an alarm area with an outer guard ring of 8 nm and an inner guard ring of 4 nm within 2 minutes.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2J

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA
Ability to operate and to interpret and analyze information obtained from ARPA, including: deriving and analyzing information, critical echoes, exclusion areas and trail maneuvers

TASK: Trial Maneuver

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale, with at least ten targets within 12 miles of the own ship.

PERFORMANCE BEHAVIOR: Demonstrate the trial maneuver function.

PERFORMANCE STANDARD:

1. Access the trial maneuver mode;
2. Enter course changes;
3. Determine the course to steer to avoid all targets by at least 2 NM, within 30 seconds;.
4. Enter speed changes;
5. Determine the speed necessary to avoid all targets by at least 2 NM, within 30 seconds; and
6. Return the display to real time.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2K

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA

Ability to operate and to interpret and analyze information obtained from ARPA, including: deriving and analyzing information, critical echoes, exclusion areas and trail maneuvers

TASK: Switch stabilization modes

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale.

PERFORMANCE BEHAVIOR: Switch the display from a north-up relative motion sea stabilized display to a true motion ground stabilized display.

PERFORMANCE STANDARD:

Complete the change within 10 seconds.

Candidate

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Assessor

Position

Vessel or School

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Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2L

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA
Ability to operate and to interpret and analyze information obtained from ARPA, including: deriving and analyzing information, critical echoes, exclusion areas and trail maneuvers

TASK: Navigation lines

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale, using 2 nav marks and one nav line.

PERFORMANCE BEHAVIOR: Establish a nav line to monitor and maintain the vessel on track.

PERFORMANCE STANDARD:

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 (cont'd) 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.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

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Reference No.

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2M

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA
Ability to operate and to interpret and analyze information obtained from ARPA, including: deriving and analyzing information, critical echoes, exclusion areas and trail maneuvers

TASK: Determine set and drift

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale.

PERFORMANCE BEHAVIOR: Determine the set and drift of the vessel.

PERFORMANCE STANDARD:

1. The display was sea stabilized.
2. A stationery target was identified, acquired and designated.
3. The target's course and speed was read as the set and drift within 3 minutes.

Candidate

Candidate's Mariner Reference No.

Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date

**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-3-2N

FUNCTION: Navigation at the Operational Level

COMPETENCE: Use of radar and ARPA to maintain the safety of navigation

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA

Ability to operate and to interpret and analyze information obtained from ARPA, including: deriving and analyzing information, critical echoes, exclusion areas and trail maneuvers

TASK: Determine range and bearing

PERFORMANCE CONDITION: On an operational ARPA that meet the standards of 33 CFR 164.38 (or an ARPA simulator that meets applicable national and international performance standards for ARPA), with the ARPA on the 12 mile scale.

PERFORMANCE BEHAVIOR: Determine the range and bearing to an object.

PERFORMANCE STANDARD:

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 which 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 $\pm 1\%$ of the range scale in use; and
3. obtains a bearing within $\pm 1^\circ$ of the assessor's solution.

Candidate

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Assessor

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-4-1A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Transmit and receive information by visual signaling

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Visual Signaling* -- Ability to transmit and receive signals by Morse code

TASK: Flashing Light

PERFORMANCE CONDITION: On a ship or in a laboratory using a device by which sends flashing light messages at a speed of 4 wpm; when sent two messages, the first consisting of the following:

1. DE followed by a four- (4) letter identity signal, sent once;
2. YU: Indicating that a Code Group follows, sent once;
3. Text: Five random five letter groups, each of which is repeated twice; and,
4. Ending: AR;

and the second consisting of:

1. DE followed by a four letter identity signal, sent once;
2. YU: Indicating that a Code Group follows; sent once;
3. Text: Five three character code groups, each of which is sent twice;
4. Ending: AR.

PERFORMANCE BEHAVIOR: Read the Morse code flashing light signals, record the letters and numbers of the entire message, and interpret the code groups in accordance with H.O. 102.

PERFORMANCE STANDARD:

1. Record the letters of the message; and,
2. Achieve a minimum passing score of 80% scored as follows:
 - a. three points are given for each correct character of the five random five letter groups for a possible total of 75 points; and
 - b. five points are given for each correct plain language interpretation (candidate must look up the meaning of the code groups in H.O. 102) of each of the five code groups for a possible total of 25 points.

Candidate

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-5-1A

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maneuver the ship

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Ship maneuvering and handling --*
Maneuvering and procedures for the rescue of person overboard

TASK: Maneuver for man overboard

PERFORMANCE CONDITION: On a ship at sea or in a full mission simulator, upon receiving notification of a Man-Overboard (MOB).

PERFORMANCE BEHAVIOR: Immediately initiate either a Williamson Turn or Anderson Turn (as appropriate for conditions), return the vessel to the MOB, and give the command to launch the rescue boat.

PERFORMANCE STANDARD:

1. Order full rudder to the side of MOB and place engines on stand by (do not RPMs);
2. Simulate releasing the lighted buoy;
3. Sound MOB signal if other vessels are in sight;
4. Mark (if equipped) the ship's position on ARPA/GPS or DGPS;
5. Simulate a "Mayday" call on the VHF notifying any vessels in vicinity of the MOB;
6. Complete the recovery turn;
7. State that the rescue boat would be prepared for launch; or scrambling nets rigged on correct side of the vessel;
8. State that when on the reciprocal of the original course, the vessel will be slowed and stopped within .1 nm of the MOB to begin the recovery/search.

Candidate

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Assessor

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-5-1B

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maneuver the ship

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Ship maneuvering and handling --
Basic Maneuvering*

TASK: Course change of more than 45°

PERFORMANCE CONDITION: On a ship at sea or in a full mission simulator.

PERFORMANCE BEHAVIOR: Order turning the vessel left or right more than 45° from the original heading.

PERFORMANCE STANDARD:

1. The candidate 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. Reduce rudder as the ship approaches the new course; and,
3. Steady on the new course without over shooting the course by more than 10°

Candidate

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**TABLE A-II/1 Specification of Minimum Standard of Competence
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

ASSESSMENT NO. OICNW-5-1C

FUNCTION: Navigation at the Operational Level

COMPETENCE: Maneuver the ship

KNOWLEDGE, UNDERSTANDING & PROFICIENCY: *Ship maneuvering and handling --
Basic Maneuvering*

TASK: Emergency stop

PERFORMANCE CONDITION: On a ship at sea or in a full mission simulator, proceeding at a speed of at least half ahead.

PERFORMANCE BEHAVIOR: Execute an emergency stop.

PERFORMANCE STANDARD:

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°.

Candidate

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Assessor

Position

Vessel or School

Assessor's Mariner
Reference No.

Date