



## Tips for Completing Assessments

### Management Assessments

- [Helpful Hints](#)
- [Control Sheets from Policy Letter 04-02](#)

## Helpful Hints – Management Assessments

Assessments must be signed by an officer holding one of the following endorsements 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

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

If you are applying for a Near Coastal endorsement, you need not complete the following Celestial assessments:

- M-1-2A
- M-1-2B
- M-1-2C
- M-1-2D
- M-1-2E
- M-1-2F
- M-1-2G
- M-1-2H
- M-1-2I.

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 a credential issued with a limitation.

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-1A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Plan a voyage and conduct navigation

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Voyage planning and navigation for all conditions by acceptable methods of plotting ocean tracks; Routing in accordance with the General Principles on Ship's Routing

**TASK:** Create a Navigation Plan

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

**PERFORMANCE BEHAVIOR:** Create a navigation plan for a coastwise voyage of at least 600 miles at night in restricted waters.

**PERFORMANCE STANDARD:**

**Appraisal** The candidate's plan took into account paragraph 2 of the annex to IMO Assembly Resolution A 893(21):

1. The condition of the vessel, 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** The candidate's plan contained the following in accordance with paragraph 3 of the annex to IMO Assembly Resolution A 893(21):

1. Courses plotted on the appropriately scaled charts noting the ETA at each way point, including the final way point;
2. Courses and distances between way points were correctly calculated and indicated on the charts;
3. The most direct route that avoided all hazards to navigation by the margin of safety of three miles, where possible;
4. The areas of all required speed changes;
5. The minimum under keel clearances in critical areas; positions requiring a change of machinery status;
6. Way points of all course changes;
7. The methods and frequency of position fixing, including areas requiring the highest accuracy;

**TABLE A-II/2 Performance Standards for Assessments of Competence  
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**Control Sheet**

- The positions and radio hailing frequencies or channels where port authorities, pilots and VTS services must be notified were noted on the relevant chart;
8. The state of the tide and currents at the port of departure for the times of departure and transit were determined;
  9. Contingency plan for alternative actions in cases of emergency

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-1B**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Reporting in accordance with the Guidelines and Criteria for Ship Reporting Systems

**TASK:** Position Reporting Systems

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

**PERFORMANCE BEHAVIOR:** Describe all ship position reporting and VTS systems required for the route.

**PERFORMANCE STANDARD:**

1. All shore side entities requiring ship positions reports and all VTS services for the route are correctly identified.
2. All reporting requirements are correctly described.
3. The hailing frequencies, and position reporting requirements of all VTS services are noted on the appropriate charts.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-2A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determination by celestial observation

**TASK:** Latitude by Ex-Meridian (Sun)

**PERFORMANCE CONDITION:** On a ship underway, with the sun and the horizon visible, and at least three minutes before or three minutes after the time of meridian passage over the meridian of the observer.

**PERFORMANCE BEHAVIOR:** Measure the altitude of the sun and calculate the latitude of the ship at meridian passage using the ex-meridian observation.

**PERFORMANCE STANDARD:**

The latitude calculated at meridian passage is within  $\pm .1$  nm of the assessor's position.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-2B**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determination by celestial observation

**TASK:** Latitude by Meridian Transit (Other Than Sun)

**PERFORMANCE CONDITION:** On a ship underway, with a celestial body other than the sun at upper transit and a clear horizon.

**PERFORMANCE BEHAVIOR:** Measure the altitude of the body as it crosses the meridian of the observer and calculate the latitude of the ship.

**PERFORMANCE STANDARD:**

The latitude calculated at meridian passage is within  $\pm .1$  nm of the assessor's position.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
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Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-2C**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determination by celestial observation

**TASK:** Star Identification

**PERFORMANCE CONDITION:** On a ship underway or in a navigational laboratory, given the times of observation, altitudes and azimuths of three unknown stars.

**PERFORMANCE BEHAVIOR:** Identify the three stars.

**PERFORMANCE STANDARD:**

Within 20 minutes, the stars are correctly identified.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-2D**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determination by celestial observation

**TASK:** Star Selection

**PERFORMANCE CONDITION:** On a ship underway or in a navigational laboratory, given the times of observation.

**PERFORMANCE BEHAVIOR:** Identify the best three stars or planets to obtain a fix.

**PERFORMANCE STANDARD:**

Within 20 minutes, the candidates selected three stars which:

1. Are the three brightest; and,
2. Have the greatest crossing angles between each other.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
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**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-2E**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determination by celestial observation

**TASK:** LOP From High Altitude Sight

**PERFORMANCE CONDITION:** On a ship underway or in a navigational laboratory, given the time of observation and measurement of a body at a high altitude.

**PERFORMANCE BEHAVIOR:** Plot the line of position of the ship at the time of the observation.

**PERFORMANCE STANDARD:**

1. Within 20 minutes, the intercept and azimuth is correctly determined; and,
2. The LOP is plotted within 2 miles of the ship's position at the time of the observation as determined by the GPS or other equally accurate means.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO.** M-1-2F

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determination by celestial observation

**TASK:** Celestial Fix

**PERFORMANCE CONDITION:** On a ship underway or in a navigational laboratory, given at least four intercepts and azimuths obtained from celestial sight reductions, and the times and assumed positions for each.

**PERFORMANCE BEHAVIOR:** Plot the ship's position at the time of the last observation.

**PERFORMANCE STANDARD:**

1. The position is plotted within 12 minutes; and,
2. The position is within  $\pm .1$  nm of the assessor's position.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-2G**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determination by celestial observation

**TASK:** Great Circle Sailing

**PERFORMANCE CONDITION:** In a navigation laboratory or on a ship underway, given a latitude and longitude of departure and a latitude and longitude of arrival at least 3,000 miles apart, and using a hand held non-programmable calculator, sight reduction tables, or Publication Number 9 Tables.

**PERFORMANCE BEHAVIOR:** Calculate the great circle between the point of departure and the point of arrival.

**PERFORMANCE STANDARD:**

1. The initial course is determined within  $\pm .5^\circ$  of the assessor's solution.
2. The total distance is within 1 nm of the assessor's position.
3. The position of the vertex is within .1 nm of the assessor's position.
4. The position of points along the great circle at intervals of  $5^\circ$  (300 miles) are within 1 nm of the assessor's solution.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-2H**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determination by celestial observation

**TASK:** Mercator Sailing – Course & Distance

**PERFORMANCE CONDITION:** In a navigation laboratory or on a ship underway, given a latitude and longitude of departure and a latitude and longitude of arrival at least 1,000 miles apart, and using a hand held non-programmable calculator, sight reduction tables, or Publication Number 9 Tables.

**PERFORMANCE BEHAVIOR:** Calculate the Mercator course and distance between the point of departure and the point of arrival.

**PERFORMANCE STANDARD:**

1. The initial course is determined within  $\pm .5^\circ$  of the assessor's solution.
2. The total distance is within 1 nm of the assessor's position.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-2I**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determination by celestial observation

**TASK:** Mercator Sailing – Final Position

**PERFORMANCE CONDITION:** In a navigation laboratory or on a ship underway, given a latitude and longitude of departure and a course and distance for a passage of at least 1,000 miles nm, and using a hand held non-programmable calculator, or Publication Number 9 Tables.

**PERFORMANCE BEHAVIOR:** Calculate the final position using the Mercator formula.

**PERFORMANCE STANDARD:**

The initial course is determined within  $\pm 1$  nm of the assessor's solution.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-3A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determined by terrestrial observations, including the ability to use appropriate charts, notices to mariners and other publications to assess the accuracy of the resulting position fix.

**TASK:** Position Fix by Terrestrial 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 on the chart in use.

**PERFORMANCE STANDARD:**

1. The position is within  $\pm .1$  nm of the assessor's position.
2. Crossing angles of bearings should be not less than  $30^\circ$  and not more than  $160^\circ$  between bearings.
3. The bearings of objects abeam or close to the beam are observed first.
4. The chart in use is the largest scale suitable for the waters being transited.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-1-4A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine position and the accuracy of resultant position fix by any means

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Position determined by using modern electronic navigational aids, with specific knowledge of their operating principles, limitations, sources of error, detection of misrepresentation of information and methods of correction to obtain accurate position fixing.

**TASK:** GPS – Waypoint Entry

**PERFORMANCE CONDITION:** On a ship underway, or a full mission ship simulator, or in a navigation laboratory, using a GPS receiver which meets IMO standards, and given a port of departure and a port of arrival at least 2,000 nm apart in a generally east west direction, with at least 3 legs, which include both rhumb line and great circle legs.

**PERFORMANCE BEHAVIOR:** Enter the waypoints and route for the voyage into the GPS.

**PERFORMANCE STANDARD:**

1. The way points are correctly determined entered, and saved;
2. The route is correctly entered and saved; and,
3. The great circle or rhumb line legs are correctly designated.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-2-1A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine and allow for compass errors

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ability to determine and allow for errors of the magnetic and gyro compasses

**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 or 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.
5. The deviation is correctly recorded in the compass record book and the ship's log.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-2-1B**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine and allow for compass errors

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ability to determine and allow for errors of the magnetic and gyro compasses

**TASK:** Construct a deviation table

**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:** Construct a Deviation Table

**PERFORMANCE STANDARD:**

1. The candidate will swing the ship to a cardinal heading by the magnetic compass and compare the magnetic heading to the charted range or 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.
5. The deviation is correctly recorded in the compass record book and the ship's log.
6. The process is repeated every 15 degrees to the next cardinal heading by magnetic compass.
7. A deviation table is constructed for the  $90^\circ$  compass segment.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-2-1C**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine and allow for compass errors

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ability to determine and allow for errors of the magnetic and gyro compasses

**TASK:** Amplitude of the Sun

**PERFORMANCE CONDITION:** On a ship underway, with the center of the sun on either the visible horizon or the celestial horizon.

**PERFORMANCE BEHAVIOR:** Measure the bearing of the sun.

**PERFORMANCE STANDARD:**

1. The bearing of the sun is read when the repeater is level.
2. The time of the reading noted.
3. The true bearing of the sun for the time of the reading is determined (if the bearing of the sun was taken on the visible horizon, the Table 28 correction is properly applied).
4. The gyrocompass bearing is compared to the true bearing and the gyro error is determined.
5. The solution is  $\pm 1^\circ$  of the assessor's solution.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-2-1D**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine and allow for compass errors

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ability to determine and allow for errors of the magnetic and gyro compasses

**TASK:** Apply Compass Error to Magnetic Course

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

**PERFORMANCE BEHAVIOR:** Correctly apply the compass error to the course by magnetic compass to make good the intended true course.

**PERFORMANCE STANDARD:**

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

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO.** M-2-1E

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine and allow for compass errors

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ability to determine and allow for errors of the magnetic and gyro compasses

**TASK:** Apply Compass Error to Magnetic Bearings

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

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

**PERFORMANCE STANDARD:**

1. Magnetic compass error is correctly applied to the magnetic bearings.
2. The position is within  $\pm .5$  nm of the assessor's position on a chart with a scale of no more than 1:150,000.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-2-1F**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Determine and allow for compass errors

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ability to determine and allow for errors of the magnetic and gyro compasses

**TASK:** Apply Compass Error to Gyrocompass Course

**PERFORMANCE CONDITION:** On a ship underway, a full mission ship simulator, or in a navigational laboratory.

**PERFORMANCE BEHAVIOR:** Correctly apply the compass error to the course by gyrocompass to make good the intended true course.

**PERFORMANCE STANDARD:**

1. Compass error is correctly applied to the gyrocompass course.
2. The solution is  $\pm 1^\circ$  of the assessor's solution.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO.** M-3-1A

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Coordinate search and rescue operations

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** A thorough knowledge of and ability to apply the procedures contained in the *IMO Merchant Ship Search and Rescue Manual (MERSAR)*

**TASK:** Coordinate Search & Rescue Operations

**PERFORMANCE CONDITION:** On a ship underway, a full mission simulator, a navigational laboratory or in an approved Coast Guard Search and Rescue course.

**PERFORMANCE BEHAVIOR:** Plan for the coordination of search and rescue operations.

**PERFORMANCE STANDARD:**

1. The candidate established communication methods and message texts to be used in search patterns in accordance with MERSAR.
2. The candidate determined the most probable search area by calculating:
  - a) the target probability area when the intended course of the target is known; and
  - b) the set and drift of a life raft using a set and drift graph of approximate drift values.
3. The candidate determined the type of search pattern and plotted from memory from the point of origin a parallel track and an expanding square search pattern on a chart of appropriate scale.
4. The candidate coordinated at least one other vessel in the search pattern.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-4-1A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Establish watchkeeping arrangements and procedures

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

**TASK:** Identify Vessels by Light Configurations

**PERFORMANCE CONDITION:** On a ship underway or a simulator.

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

**PERFORMANCE STANDARD:**

The candidate identified the situation or occupation of 19 out of 20 vessels that have different light configurations.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-4-1B**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Establish watchkeeping arrangements and procedures

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

**TASK:** Identify Vessels by Day Shapes

**PERFORMANCE CONDITION:** On a ship underway or a simulator.

**PERFORMANCE BEHAVIOR:** Identify vessels through observation of their day shapes.

**PERFORMANCE STANDARD:**

The candidate identified the situation or occupation of 9 out of 10 vessels that have different day shapes.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-4-1C**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Establish watchkeeping arrangements and procedures

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

**TASK:** Apply the Rules of the Road to Avoid Collision

**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 in ample time was taken in accordance with the steering and sailing rules to achieve a CPA of at least 3 nm.
4. Speed or course changes were large enough to be readily apparent to another vessel observing visually or by radar.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-4-2A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Establish watchkeeping arrangements and procedures

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Thorough knowledge of the content, application and intent of the Principles to be observed in keeping a navigational watch -- Effective bridge teamwork procedures

**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 (which meet 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.
2. Each observation is within  $\pm 2^\circ$  of the assessor's bearing.
3. 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.
4. Each observation is within  $\pm 2^\circ$  of the assessor's bearing.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-5-1A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maintain safe navigation through the use of radar and ARPA and modern navigation systems to assist command decision-making

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** An appreciation of system errors and thorough understanding of the operational aspects of modern navigational systems, including radar and ARPA.

**TASK:** Operate ARPA Controls & Functions

**PERFORMANCE CONDITION:** On a radar/ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards.

**PERFORMANCE BEHAVIOR:** Operate the controls to accomplish the following tasks:

- set up and maintain the display;
- manually acquire targets; set CPA/TCPA limits;
- turn on past positions in all display modes;
- display true and relative vectors;
- vary vector length
- designate a dangerous target;
- put ARPA display in true, north up relative motion, and head up;
- the trail maneuver mode with both a speed change and a course change;
- obtain a range and bearing;
- activate the lost target alarm;
- silence the lost target alarm;
- cancel a single target;
- cancel all targets;
- ground stabilize the display;
- sea stabilize the display;
- draw a navigation line;
- set up an auto acquisition zone
- suppress auto acquisition in a certain area;
- turn auto acquisition off and on.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**PERFORMANCE STANDARD:**

1. The correct controls to accomplish the task are operated.
2. All controls are operated within 2 seconds.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-5-1B**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maintain safe navigation through the use of radar and ARPA and modern navigation systems to assist command decision-making

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** An appreciation of system errors and thorough understanding of the operational aspects of modern navigational systems, including radar and ARPA.

**TASK:** Determine Target Data

**PERFORMANCE CONDITION:** On a radar/ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with 6 targets displayed on the 12 mile range scale, 3 of which have CPA's of less than 2 nm.

**PERFORMANCE BEHAVIOR:** Determine the direction and speed of relative motion, true course and speed, CPA and time to CPA for each target with a CPA of less than 2 nm.

**PERFORMANCE STANDARD:**

1. The student obtained the DRM solutions within 2 minutes of the start time and all solutions were within  $\pm 3^\circ$  of the assessor's solution;
2. The student obtained the SRM solutions within 3 minutes of the start time and all solutions were within  $\pm 2$  knots of the assessor's solution;
3. The student obtained the CPA solutions within 4 minutes and all solutions were within  $\pm 0.5$  nm of the assessor's solution; and,
4. The student obtained the TCPA solutions within 5 minutes and all solutions were within  $\pm 2$  minutes of the assessor's solution.
5. The student obtained the true course and speed of the 3 ships with CPA's of less than 2 nm within 6 minutes and all solutions were within  $\pm 2$  kts and  $\pm 3^\circ$  of the assessor's solution.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-5-1C**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maintain safe navigation through the use of radar and ARPA and modern navigation systems to assist command decision-making

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** An appreciation of system errors and thorough understanding of the operational aspects of modern navigational systems, including radar and ARPA.

**TASK:** Parallel Indexing

**PERFORMANCE CONDITION:** On a radar/ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with multiple targets displayed on the 12 mile range scale, in congested coastal waters, while transiting a traffic separation scheme, in the presence of current, and with at least one course change of not less than 30°.

**PERFORMANCE BEHAVIOR:** Plan and execute a passage through the area of transit, using parallel index lines to monitor the ship's position.

**PERFORMANCE STANDARD:**

The candidate:

1. Constructs a parallel index 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 parallel index line;
3. Monitors the vessel's movement to determine if the edge of the VRM moves inside the parallel index line; and,
4. Obtains a VRM that does not drift more than 10 % of the VRM distance inside the parallel index line.
5. Observed all the requirements of COLREGS Rule 10.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-5-1C**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maintain safe navigation through the use of radar and ARPA and modern navigation systems to assist command decision-making

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** An appreciation of system errors and thorough understanding of the operational aspects of modern navigational systems, including radar and ARPA.

**TASK:** Bridge Resource Management

**PERFORMANCE CONDITION:** On a radar/ARPA simulator that meets the standards of 33 CFR 164.38 and other applicable national and international performance standards, with multiple targets displayed on the 12 mile range scale, in congested coastal waters, while transiting a traffic separation scheme, in the presence of current, and with a least one course change of not less than 30° in the route, and in reduced visibility.

**PERFORMANCE BEHAVIOR:** Plan and execute a passage through the area of transit, using the principles of bridge resource management.

**PERFORMANCE STANDARD:**

The candidate:

1. Assigns BRM roles;
2. Monitors the ship's progress;
3. Communicates clearly and effectively;
4. Controls passage for safe navigation and collision avoidance; and,
5. Ensures all team members use all navigational data available.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-6-1A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Forecast weather and oceanographic conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ability to understand and interpret a synoptic chart and to forecast area weather, taking into account local weather conditions and information received by weather fax.

**TASK:** Weather Forecast (24 Hours)

**PERFORMANCE CONDITION:** On a ship underway or in a laboratory, given synoptic surface weather charts and 500mb weather charts of the previous 24 hour period, and temperature, pressure and wind readings for the previous 8 hours.

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

**PERFORMANCE STANDARD:**

The candidate's determinations of expected wind, sea and weather conditions (types and amount of cloud cover, rain and fog) are correct (when compared with the movement of the systems and fronts during subsequent 24-hour period).

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-6-2A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Forecast weather and oceanographic conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Knowledge of the characteristics of various weather systems, including tropical revolving storms and avoidance of storm centers and the dangerous quadrants.

**TASK:** Identify Weather Fronts

**PERFORMANCE CONDITION:** On a ship underway or in a laboratory, given the characteristics of a warm, cold, and occluded front, including the types of clouds found with each front.

**PERFORMANCE BEHAVIOR:** Correctly identify the fronts.

**PERFORMANCE STANDARD:**

Within 1 minute, the candidate correctly identified the warm, cold and occluded front.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-6-3A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Forecast weather and oceanographic conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ability to calculate tidal conditions.

**TASK:** Calculate Height of Tide

**PERFORMANCE CONDITION:** On a ship underway or in a navigation laboratory, given a zone time at a subordinate location.

**PERFORMANCE BEHAVIOR:** Correctly calculate the height of the tide.

**PERFORMANCE STANDARD:**

The height of the tide for the designated time is correctly determined.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-6-3B**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Forecast weather and oceanographic conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ability to calculate tidal conditions.

**TASK:** Calculate Tidal Current

**PERFORMANCE CONDITION:** On a ship underway or in a navigation laboratory, given a zone time at a subordinate location.

**PERFORMANCE BEHAVIOR:** Correctly calculate the current.

**PERFORMANCE STANDARD:**

The current for the designated time is correctly determined.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-6-3C**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Forecast weather and oceanographic conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ability to calculate tidal conditions.

**TASK:** Calculate Time of Height of Tide

**PERFORMANCE CONDITION:** On a ship underway or in a navigation laboratory, given a zone time at a subordinate location.

**PERFORMANCE BEHAVIOR:** Correctly calculate the time of the height of the tide.

**PERFORMANCE STANDARD:**

The time of a designated height of the tide is correctly determined.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-7-1A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Respond to navigational emergencies

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Action to be taken if grounding is imminent, and after grounding.

**TASK:** Actions After Grounding

**PERFORMANCE CONDITION:** In a practical course of instruction, or on a full mission ship simulator, or a ship at sea, during a drill simulation of a grounded vessel.

**PERFORMANCE BEHAVIOR:** Order the appropriate steps to minimize grounding damage.

**PERFORMANCE STANDARD:**

The candidate ordered:

1. All watertight doors closed, the hull checked, the bilges and tanks sounded and all spaces below the waterline visually inspected where possible;
2. The transfer of ballast and fuel as necessary;
3. Notification of the radio room/GMDSS station, satellite terminals and other automatic distress transmitters of the ship's position as necessary;
4. Communications with the engine room established and the sea suction switched if necessary;
5. The OICNW to determine the type of bottom on which the vessel grounded;
6. The Chief Mate to determine the threat of oil pollution.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO.** M-7-2A

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Respond to navigational emergencies

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Re-floating a grounded ship with and without assistance.

**TASK:** Re-Floating a Grounded Ship

**PERFORMANCE CONDITION:** In a practical course of instruction, or on a full mission ship simulator, or a ship at sea, during a drill simulation of a grounded vessel.

**PERFORMANCE BEHAVIOR:** Order the appropriate steps to prepare for re-floating a grounded vessel.

**PERFORMANCE STANDARD:**

The candidate ordered:

1. The depth of water around vessel to be determined;
2. The effects of tide and current;
3. The time and height of the next high tide;
4. The best placement of assist boats (if available);
5. Constant radio communications with assist boats maintained;
6. The proper day and night signals displayed;
7. Continuous update of weather forecasts;
8. The structural integrity of the hull determined;
9. The ship's stability and stresses aground to be determined;
10. The effect of deballasting or cargo removal are determined; and
11. The placement of the crew away from towing lines once pulling commences.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO.** M-7-3A

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Respond to navigational emergencies

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Action to be taken if collision is imminent and following a collision or impairment of the watertight integrity of the hull by any cause.

**TASK:** Prepare for Collision

**PERFORMANCE CONDITION:** In a practical course of instruction, or on a full mission ship simulator, or a ship at sea, during a drill simulation of an imminent collision.

**PERFORMANCE BEHAVIOR:** Order the appropriate steps to prepare for a collision.

**PERFORMANCE STANDARD:**

1. Close all water tight doors;
2. Broadcast appropriate radio messages;
3. Sound danger, maneuvering, and ship's emergency signals, as required;
4. Alert engine room; and,
5. Maneuver the ship to lesson the force of impact.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-7-3B**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Respond to navigational emergencies

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Action to be taken if collision is imminent and following a collision or impairment of the watertight integrity of the hull by any cause.

**TASK:** Actions After a Collision

**PERFORMANCE CONDITION:** In a practical course of instruction, or on a full mission ship simulator, or a ship at sea, during a drill simulation of the ship after a collision.

**PERFORMANCE BEHAVIOR:** Order the appropriate steps to maximize the safety of crew and vessel.

**PERFORMANCE STANDARD:**

1. Assess damage and determine if vessel has lost watertight integrity;
2. Determine the ship's stability and hull stresses;
3. Check for injuries to personnel;
4. Determine if threat of oil pollution exists;
5. Maintain communication with other vessel and render assistance if possible;
6. Monitor the weather; and,
7. Maneuver the vessel to minimize the effect of further damage.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-7-4A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Respond to navigational emergencies

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Emergency steering.

**TASK:** Emergency Steering

**PERFORMANCE CONDITION:** In a practical course of instruction, or on a full mission ship simulator, or a ship at sea, during a drill simulation of the ship suffering a steering casualty that can not be corrected by switching steering motors.

**PERFORMANCE BEHAVIOR:** Order the correct actions to operate the emergency steering system.

**PERFORMANCE STANDARD:**

The candidate ordered:

1. The steering motor switched to the motor not in use;
2. Crewmen to aft steering room;
3. Communications with the steering engine room established;
4. Steering control switched from the bridge to the steering engine room; and,
5. Appropriate helm orders or courses to be steered.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO.** M-7-5A

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Respond to navigational emergencies

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Emergency towing arrangements and towing procedures.

**TASK:** Emergency Towing

**PERFORMANCE CONDITION:** In a practical course of instruction, or on a full mission ship simulator, or a ship at sea, during a drill simulation of the ship suffering a engine casualty.

**PERFORMANCE BEHAVIOR:** Order the correct actions to arrange the vessel for emergency towing.

**PERFORMANCE STANDARD:**

1. Order the anchor and chain lowered to the water (or into the water as directed by the towing vessel);
2. Make sure the chain will not pay out until towing vessel requests additional chain; and,
3. Lower a messenger to the water line in case it is needed.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-8-1A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maneuver and handle a ship in all conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Maneuvers when approaching pilot stations and embarking or disembarking pilots, with due regard to weather, tide, head reach and stopping distances.

**TASK:** Maneuver to Embark/Disembark a Pilot

**PERFORMANCE CONDITION:** At sea, on a ship of at least 3,000 gross tons (ITC), or in a full mission ship simulator using the math model of a ship of at least 3,000 gross tons (ITC), when approaching a pilot station or in a simulator exercise approaching a pilot station, with other ships maneuvering to and from the station.

**PERFORMANCE BEHAVIOR:** Maneuver the vessel for embarkation or disembarkation of a pilot.

**PERFORMANCE STANDARD:**

1. Notify the engine room the time at which the vessel will begin maneuvering;
2. Determine the direction and force of the wind and sea;
3. Determine which side the pilot boat wishes to use;
4. Determine the heading needed to make a lee;
5. Approach the pilot station after determining how the presence of other traffic maneuvering to or from the pilot station affects your safe approach;
6. Maneuver and slow the vessel to make a lee and allow the pilot boat to safely maintain a position at the pilot ladder.
7. Make sure the pilot is aboard, and the pilot boat away before resuming normal maneuvering.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-8-2A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maneuver and handle a ship in all conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Handling ship in rivers, estuaries and restricted waters, having regard to the effects of current, wind and restricted water on helm response.

**TASK:** Transit Restricted Waters

**PERFORMANCE CONDITION:** At sea, on a ship of at least 3,000 gross tons (ITC), or in a full mission ship simulator using the math model of a ship of at least 3,000 gross tons, in an exercise of at least 30 minutes, transiting restricted waters.

**PERFORMANCE BEHAVIOR:** Pilot the vessel.

**PERFORMANCE STANDARD:**

The candidate:

1. Determined the intended track of the vessel;
2. Determined the force and direction of the wind and current;
3. Set courses to counter the effect of wind and current to maintain the ship on the intended track;
4. Used the proper speed and rudder orders to maintain the ship on the intended track (in the deepest water) during turns around points and bends in the river.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-8-3A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maneuver and handle a ship in all conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Application of constant rate of turn techniques.

**TASK:** Constant Rate of Turn Techniques

**PERFORMANCE CONDITION:** At sea, on a ship of at least 3,000 gross tons (ITC), or in a full mission ship simulator using the math model of a ship of at least 3,000 gross tons (ITC), in an exercise with a turn of least 50°.

**PERFORMANCE BEHAVIOR:** Complete the turn while maintaining a constant rate of turn throughout the maneuver.

**PERFORMANCE STANDARD:**

The candidate:

1. Determined the radius of the turn;
2. Determine the rate of turn to maintain a constant;
3. Applied the correct amount of rudder to maintain the rate of turn with no more than two adjustments of less than 5° each.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-8-4A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maneuver and handle a ship in all conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Maneuvering in shallow water, including the reduction in under keel clearance caused by squat, rolling and pitching.

**TASK:** Shallow Water Effects -- Squat

**PERFORMANCE CONDITION:** At sea, on a ship of at least 3,000 gross tons (ITC), or in a full mission ship simulator using the math model of a ship of at least 3,000 gross tons.

**PERFORMANCE BEHAVIOR:** Set the speed to prevent the vessel from touching bottom.

**PERFORMANCE STANDARD:**

The candidate:

1. Determined the under keel clearance;
2. Determined the maximum speed allowable to keep the vessel from squatting and touching bottom; and,
3. Set the speed of the vessel to keep the ship on an even trim on straight courses and during turns.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-8-5A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maneuver and handle a ship in all conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Interaction between passing ships and between own ship and nearby banks (canal effect).

**TASK:** Shallow Water Effects – Passing Vessels

**PERFORMANCE CONDITION:** At sea, on a ship of at least 3,000 gross tons (ITC), or in a full mission ship simulator using the math model of a ship of at least 3,000 gross tons, while conning a deep draft vessel in a narrow channel, and meeting a vessel on the opposite course.

**PERFORMANCE BEHAVIOR:** Pass the other vessel close aboard.

**PERFORMANCE STANDARD:**

The candidate will:

1. Order the rudder hard left before the bow waves of each vessels intersect;
2. Shift the rudder after the bows pass;
3. When the sterns clear, shift the rudder and than steady on the original course.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-8-6A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maneuver and handle a ship in all conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Berthing and unberthing under various conditions of wind, tide and current with and without tugs.

**TASK:** Vessel Docking – Starboard Side To

**PERFORMANCE CONDITION:** At sea, on a ship of at least 3,000 gross tons, or in a full mission ship simulator using the math model of a ship of at least 3,000 gross tons, in clear visibility, with a wind speed of less than 15 knots and a current of less than 3 knots, on a single-screw vessel with a right hand propeller.

**PERFORMANCE BEHAVIOR:** Demonstrate docking a vessel starboard side to a pier.

**PERFORMANCE STANDARD:**

1. Planning
  - a) Determine the depth of water at the berth for the state of the tide;
  - b) Determine the strength and direction of the current for the route to the berth and at berth;
  - c) Determine the direction and velocity of the wind; and
  - d) Determine the appropriate courses and maneuvers for the approach to the berth.
2. Approach
  - a) Approach the dock at the angle required by the wind and current, and at a speed that allows the vessel to maintain its heading and be stopped before alliding;
3. Docking
  - a) The engines and spring line, as necessary, were used to stop the ship or move the vessel into final position.
  - b) The mooring lines were properly run;
  - c) All slack lines were taken in until the vessel lay secure alongside.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-8-6B**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maneuver and handle a ship in all conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Berthing and unberthing under various conditions of wind, tide and current with and without tugs.

**TASK:** Vessel Docking – Port Side To

**PERFORMANCE CONDITION:** At sea, on a ship of at least 3,000 gross tons, or in a full mission ship simulator using the math model of a ship of at least 3,000 gross tons, in clear visibility, with a wind speed of less than 15 knots and a current of less than 3 knots, on a single-screw vessel with a right hand propeller.

**PERFORMANCE BEHAVIOR:** Demonstrate docking a vessel starboard side to a pier.

**PERFORMANCE STANDARD:**

2. Planning

- e) Determine the depth of water at the berth for the state of the tide;
- f) Determine the strength and direction of the current for the route to the berth and at berth;
- g) Determine the direction and velocity of the wind; and
- h) Determine the appropriate courses and maneuvers for the approach to the berth.

4. Approach

- b) Approach the dock at the angle required by the wind and current, and at a speed that allows the vessel to maintain its heading and be stopped before alliding;

5. Docking

- c) The engines and spring line, as necessary, were used to stop the ship or move the vessel into final position.
- d) The mooring lines were properly run;
- c) All slack lines were taken in until the vessel lay secure alongside.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO.** M-8-7A

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maneuver and handle a ship in all conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Ship and tug interaction.

**TASK:** Turn Vessel w. Tug Assistance

**PERFORMANCE CONDITION:** At sea, on a ship of at least 3,000 gross tons (ITC), or in a full mission ship simulator using the math model of a ship of at least 3,000 gross tons.

**PERFORMANCE BEHAVIOR:** Turn the ship short around using a tug forward and a tug aft.

**PERFORMANCE STANDARD:**

The candidate will complete a 180° turn in 2 ship lengths.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-8-8A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maneuver and handle a ship in all conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Choice of anchorage; anchoring with one or two anchors in limited anchorages and factors involved in determining the length of anchor cable to be used.

**TASK:** Anchoring

**PERFORMANCE CONDITION:** At sea, on a ship of at least 3,000 gross tons (ITC), or in a full mission ship simulator using the math model of a ship of at least 3,000 gross tons, in clear visibility, with a wind speed of less than 15 knots and a current of less than 3 knots.

**PERFORMANCE BEHAVIOR:** Demonstrate anchoring the vessel.

**PERFORMANCE STANDARD:**

1. The Anchor plan included determining:
  - a) depth of water;
  - b) type of bottom;
  - c) wind and current;
  - d) bottom obstructions;
  - e) room to swing;
  - f) the place to anchor;
  - g) courses and maneuvers to the anchor site;
  - h) the desired final heading and,
  - i) the expected weather for the time at anchor.
2. Approach
  - a) If possible, the ship did not pass to windward or up current of any anchored vessel or hazard to navigation; or the ship had enough way to pass safely any anchored ships or hazards to navigation.
3. Placement
  - a) The anchor site was approached slowly;
  - b) The ship's position was checked by natural landmarks and aids;
  - c) the ship's engines were put astern to stop the ship in position on the approximate desired final heading;

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

- d) the anchor was dropped as the vessel began sternway;
  - a) the ship was backed slowly;
  - b) a length of chain 5-7 times the water depth was paid out slowly; and
4. Fetching up
- a) the ship was allowed to fetch up on the chain
  - b) the ship rode on a final heading that was within 40° of the desired final heading.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

Mariner	SSN No.	Date
Assessor (sign and print name)	License No.	MMD No.
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-8-1A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Maneuver and handle a ship in all conditions

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Dragging anchor; clearing fouled anchors.

**TASK:** Dragging Anchor

**PERFORMANCE CONDITION:** At sea, on a ship of at least 3,000 gross tons (ITC), or in a full mission ship simulator using the math model of a ship of at least 3,000 gross tons; with the vessel at anchor.

**PERFORMANCE BEHAVIOR:** Take all precautions to determine if the vessel is dragging anchor.

**PERFORMANCE STANDARD:**

The candidate will:

1. Set the GPS anchor watch function;
2. Set the VRM and EBL of the ARPA or radar on prominent fixed objects; and,
3. Take frequent visual bearings on fixed objects approximately 90° apart.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-9-1A**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Use of stability and trim diagrams and stress-calculating equipment, including automatic data-based (ADB) equipment, and knowledge of loading cargoes and ballasting in order to keep hull stress within acceptable limits.

**TASK:** Determine GM -- Arrival

**PERFORMANCE CONDITION:** On a ship, or in a stability laboratory, given Coast Guard approved stability software for a container ship of at least 10,000 gross registered tons, and during a loading of 500 containers and a discharge of least 700 containers.

**PERFORMANCE BEHAVIOR:** Determine the arrival GM at the next port of call.

**PERFORMANCE STANDARD:**

The candidate will properly enter the following data:

1. The loading and discharge data;
2. Potable fresh water and ballast;
3. All stores taken aboard;
4. All fuel data;
5. All free surface; and,
6. All changes due to fuel, water and stores consumed.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-9-1B**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Use of stability and trim diagrams and stress-calculating equipment, including automatic data-based (ADB) equipment, and knowledge of loading cargoes and ballasting in order to keep hull stress within acceptable limits.

**TASK:** Determine GM – Flooded Engine Room

**PERFORMANCE CONDITION:** On a ship, or in a stability laboratory, given Coast Guard approved stability software for a container ship of at least 10,000 gross registered tons, with a loaded voyage condition entered, and given a simulation of a flooded engine room.

**PERFORMANCE BEHAVIOR:** Determine the GM.

**PERFORMANCE STANDARD:**

The candidate correctly completed the determination in 5 minutes or less.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-9-1C**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Use of stability and trim diagrams and stress-calculating equipment, including automatic data-based (ADB) equipment, and knowledge of loading cargoes and ballasting in order to keep hull stress within acceptable limits.

**TASK:** Determine GM – Flooded Hatch

**PERFORMANCE CONDITION:** On a ship, or in a stability laboratory, given Coast Guard approved stability software for a container ship of at least 10,000 gross registered tons, with a loaded voyage condition entered, and given a simulation of a flooded hatch.

**PERFORMANCE BEHAVIOR:** Determine the GM.

**PERFORMANCE STANDARD:**

The candidate correctly completed the determination in 5 minutes or less.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	

**TABLE A-II/2 Performance Standards for Assessments of Competence  
Masters and Chief Mates on Ships of 3000 Gross Tonnage or More (ITC)**

**Control Sheet**

**ASSESSMENT NO. M-9-1D**

**FUNCTION:** Navigation at the Management Level

**COMPETENCE:** Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes

**KNOWLEDGE, UNDERSTANDING & PROFICIENCY:** Use of stability and trim diagrams and stress-calculating equipment, including automatic data-based (ADB) equipment, and knowledge of loading cargoes and ballasting in order to keep hull stress within acceptable limits.

**TASK:** Determine Sheering Forces and Bending Moment

**PERFORMANCE CONDITION:** On a ship, or in a stability laboratory, given Coast Guard approved stability software for a ship of at least 10,000 gross registered tons, that is loaded to between 1/3 and 1/2 of its capacity and given a simulation of cargo loading of adjacent cargo spaces.

**PERFORMANCE BEHAVIOR:** Determine the sheering forces and bending moments during the loading.

**PERFORMANCE STANDARD:**

The candidate:

1. Properly entered the data for the cargo and its location;
2. Determined sheering forces and bending moments in 10 minutes or less.

A ship's officer who signs below attests that he/she has met the requirements to qualify as a shipboard assessor.

_____	_____	_____
Mariner	SSN No.	Date
_____	_____	_____
Assessor (sign and print name)	License No.	MMD No.
_____	_____	
Position	Vessel or Training Course	