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NMC Policy Letter No.01-02  
8 January 2002

From: Commanding Officer, U. S. Coast Guard National Maritime Center  
To: Distribution

Subj: APPLICANTS FOR OCEAN OR NEAR COASTAL MATE LICENSE FOR SERVICE ON VESSELS OF 500 OR MORE GROSS TONNAGE (GT) (200 GROSS REGISTER TONS [GRT]) WITH QUALIFYING SERVICE OR TRAINING BEGINNING ON OR AFTER 1 AUGUST 1998 AND ALL APPLICANTS BEGINNING 1 FEBRUARY 2002

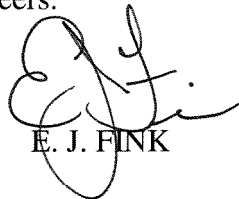
Ref: (a) International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW)  
(b) Title 46, Code of Federal Regulations (46 CFR), Part 10

1. **PURPOSE.** This policy letter provides guidance about the requirements for processing and evaluating an application, and issuance of, a mate's license valid for service on seagoing vessels of 200 or more gross register tons (GRT) and STCW certification as an officer in charge of a navigational watch. ***It applies only to applicants who do not participate in an approved training program.***
2. **ACTION.** Commanding officers of units with marine safety responsibilities should bring this policy letter to the attention of the maritime industry with interest in the personnel field. Personnel at Regional Examination Centers should use the information in this policy letter for evaluating applicants for the licenses to which it applies. This policy letter will be distributed by electronic means only. It is available on the World Wide Web at <http://www.uscg.mil/STCW/m-policy.htm>.
3. **DISCUSSION.**
  - a. An applicant for a license as mate that authorizes service on seagoing vessels of 200 GRT or more must meet the requirements of the STCW as well as the requirements of the licensing regulations [46 CFR 10.901(d)]. Many of the STCW's requirements exceed the requirements of the domestic regulations and therefore take precedence; e.g., length of required sea service. Where the requirements of the domestic regulations exceed or have no STCW equivalent, they will apply; e.g., character requirements. Enclosure (1) is a summary of the requirements and provides guidance to a license applicant. Evaluators will find enclosure (1) essential for reviewing application packages from these mariners.
  - b. There were two significant changes imposed as a result of the 1995 amendments to the STCW. One relates to required training, and the other applies to the assessments of professional skills. These are discussed below.
  - c. The STCW requires that each applicant "have completed approved education and training...." Enclosure (1) includes a list of required training. Applicants must provide

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evidence of having completed training in these subjects by providing course completion certificates.

- e. Under the STCW, an applicant must actually demonstrate the practical ability to carry out certain professional duties and tasks. Enclosure (2) provides guidance to those who will witness and attest to the applicant's successful completion of these tasks. Enclosure (3) is a summary of the tasks that must be demonstrated, and it may serve as a record of successful completion of the assessments of the applicant's professional skills. Enclosure (4) lists the criteria that the designated examiner must follow when assessing a mariner's professional skills. Strict adherence to the standards therein ensures that all applicants are evaluated equally.
- f. Enclosure (5) is a record of sea service that the mariner may use to have his or her sea service recorded. Its use is not mandatory. If not used, the evidence of sea service presented by the mariner must demonstrate that the applicant meets the sea service requirements of both the regulations and the STCW.
- g. Mariners who seek issuance of a license as third mate on or immediately after 1 February 2002 will not have had sufficient time to complete all of the professional requirements set forth in enclosure (1) to qualify for certification under the STCW. Enclosure (6) provides an alternative scheme to those mariners to enable them to qualify for the STCW certificate with minimum disruption to their careers.



E. J. FINK

- Encl: (1) Qualification as officer in charge of a navigational watch on vessels of 500 GT (200 GRT)  
 (2) Instructions for the assessment of applicants for an ocean or near coastal license as mate  
 (3) Record of completion of practical assessments  
 (4) Performance standards for assessments of competence  
 (5) Record of sea service and watchkeeping experience  
 (6) Alternative scheme

Dist: Commandant (G-MSO)  
 All District Commanders (m)  
 COs, all MSOs  
 All Activity Commanders  
 All RECs

QUALIFICATION AS AN OFFICER IN CHARGE OF A NAVIGATIONAL WATCH  
ON VESSELS OF 500 OR MORE GROSS TONNAGE (200 GRT)

1. APPLICABILITY.

a. These requirements apply to applicants for the licenses listed below who began the service or training for the license on or after 1 August 1998 and after 1 February 2002, it will apply to all applicants for these licenses:

(1) Mate ocean or near coastal waters on vessels of not more than 500 GRT. Note that the license is for GRT, in accordance with the domestic licensing scheme;

(2) Mate ocean or near coastal waters on vessels of not more than 1,600 GRT (3,000 GT); and

(3) Third mate ocean or near coastal waters on vessels of any GRT.

b. These instructions apply to license applicants who are NOT participating in a formal training program of instruction such as presented at a maritime academy. These instructions apply to mariners who are “coming up through the hawsepipe.”

2. APPLICATION. Application must be submitted on U. S. Coast Guard form CG-719B along with proofs of having completed the sea service, training, assessments, physical examination, and drug screening.

3. PHYSICAL AND MEDICAL. Applicants must meet the existing medical and physical standards set forth in the regulations, 46 CFR Part 10, and Navigation and Vessel Inspection Circular 2-98, *Physical Evaluation Guidelines for Merchant Mariner’s Documents and Licenses*. The results of the physical examination should be reported on Coast Guard form 719K available from a Regional Examination Center or on the World Wide Web at <http://www.uscg.mil/STCW/m-forms.htm>.

4. AGE, CITIZENSHIP, AND CHARACTER. Applicants must meet the standards set forth in 46 CFR 10.201.

5. SEA SERVICE.

a. Applicants must present evidence of **three** years sea service which includes six months service performing bridge watchkeeping duties under the supervision of a qualified master or licensed officer. The requirement for three-years sea service supersedes the requirements set forth in 46 CFR Part 10, Subpart D pertaining to the length of sea service required for these licenses. Up to three months of the sea service can be acquired in the engine room. Applicants must provide evidence of actual sea service; shoreside service such as a port captain, instructor, or other closely related service is not creditable towards STCW qualifications.

b. Proof of sea service may be in the form of Certificates of Discharge, or letter(s) from the master or company official. Proof of performance of bridge watchkeeping duties may be in the form of a letter from the master or company official. Enclosure (6) may also be used to document sea service and bridge watchkeeping experience.

c. The requirement for recency of service found in 46 CFR 10.202(e) applies.

d. Two of the three-years qualifying service required for a license of not more than 500 GRT or for a near coastal license of not more than 1,600 GRT (3,000 GT) must meet the requirements of 46 CFR 10.416, 10.420 or 10.421, whichever applies, except that rivers service is not acceptable. The additional year required to meet STCW requirements must be seagoing service in the deck department of ocean or near coastal steam, motor, gas turbine, sail, or auxiliary sail vessels. The additional year of service must be relevant to the STCW certification.

e. The licenses mate oceans not more than 1,600 GRT (3,000 GT), third mate near coastal any gross tons, and third mate oceans any gross tons already require three years of sea service for qualification. The amount and character of the service as far as route and vessels' sizes set forth in 46 CFR 10.407 or 10.414, whichever applies, are the requirements to qualify for these licenses. Service on rivers will not be accepted.

f. The character of the sea service required to qualify for a third mate's license is set forth in 46 CFR 10.402.

## 6. TRAINING AND ASSESSMENTS OF SKILLS.

a. The STCW requires that all training and assessment of seafarers for certification under the Convention be structured in accordance with written programs and conducted, monitored, and evaluated by qualified persons. Accordingly, every applicant for a license and STCW certificate must participate in structured, approved or accepted training. The training must be in the subjects listed in the following table. The approval or acceptance letter for this training will state that completion of the training meets the STCW's requirements for training as an OICNW in the subject of \_\_\_\_\_.

Celestial Navigation	Terrestrial Navigation	Coastal Navigation
Electronic Navigation	Compass – Magnetic and Gyro	Steering Control Systems
Meteorology	Watchkeeping (includes BRM)	Emergency procedures
Search and rescue	Basic Ship Maneuvering and Handling	Cargo Handling, Stowage and Securing
Prevention of Pollution of the Marine Environment	Basic Ship Stability	Ship Construction
Life-Saving		

Upon completion of the any of the above required training, an applicant must have been assessed in his or her abilities to actually perform the duties expected of a mariner. The Record of Completion of Practical Assessments, enclosure (3) to this policy letter, or its equivalent, may be used to record successful completion of the assessments. Where approved by the U. S. Coast Guard to do so, designated examiners at approved or accepted training courses may have completed some of the assessments as part of an applicant's completion of a course.

b. Applicants must have also attended formal, approved or accepted training courses in certain professional areas and present course completion certificates. In some courses, the applicant may have been given the opportunity to complete some of the practical demonstrations of skills listed in enclosure (3). In others, all of the competencies will have been assessed as part of the course and there are no related practical demonstrations of skills. The required courses are:

(1) Basic safety training (BST);

(2) Advanced firefighting;

(3) Automatic Radar Plotting Aids (ARPA). If this course is not completed the STCW certificate will be endorsed to limit service to vessels that are not ARPA equipped;

(4) Global Maritime Distress and Safety System (GMDSS). If this course is not completed, a mariner will not be permitted to serve on vessels that are equipped with GMDSS equipment;

(5) Radar observer training; and

(6) Medical first aid provider training. This training in conjunction with the first aid element of BST meets the requirements of 46 CFR 10.205(h).

## 7. ON BOARD ASSESSMENTS.

a. An applicant for a license must demonstrate his or her ability to carry out certain tasks and functions. Enclosure (3) is a listing of every task in which a mariner must be assessed. It may be used as a checklist when reviewing a mariner's records to ensure that every practical demonstration has been completed.

b. Enclosure (4) contains a specification/check-off sheet for each practical demonstration required to be completed by the mariner. When the mariner has satisfactorily completed a practical demonstration, the designated assessor should complete the information on the bottom of the individual assessment specification. The applicant should present this signed copy of each specification as part of the application package.

c. The assessments of competency for this certification may be carried out by a mariner who is serving on the vessel upon which the applicant is employed and who holds either an:

(1) STCW certification at the management level (master or chief mate); or

(2) STCW certification as an officer in charge of a navigational watch and a second mate's license.

By signing any of the individual assessments of competence, enclosure (4), the assessor attests that he or she has read enclosure (2) and the document, *CONDUCTING MARINER ASSESSMENTS*. Enclosure (2) provides specific information about qualification as a designated examiner.

8. PREREQUISITE QUALIFICATION. An applicant for an unlimited license must qualify either as an able seaman-unlimited or able seaman-limited. An applicant for a license up to 1,600 GRT may meet the same requirements or qualify as able seaman-special or able seaman-special (OSV). Qualification for any of these able seaman endorsements, requires that the mariner qualify as a rating forming part of a navigational watch and demonstrate proficiency in survival craft. Further guidance is available in:

a. NMC Policy Letter 4-01, *Qualification as a Rating Forming Part of a Navigational Watch or Engineering Watch*; and

b. NMC Policy Letter 5-01, *Qualification as Proficient in Survival Craft and Rescue Boats*. Unless an applicant qualifies as a lifeboatman valid for service on vessels equipped with lifeboats, the license, STCW certificate, and the lifeboatman's endorsement on the merchant mariner's document will be limited to service on vessels not equipped with lifeboats.

c. NMC Policy Letter 8-01, *In-Service Qualification as a Lifeboatman, and Certification as Proficient in Survival Craft and Rescue Boats*.

## 9. COAST GUARD EXAMINATION.

a. After an application package has been approved by the Regional Examination Center, an applicant will be required to pass a Coast Guard Examination. The examination will consist of the modules shown in the following table. The numbers in the table represent the number of questions contained in the module.

MODULE	OCEAN	N/C	PASSING
Rules of the Road	50	50	90%
Celestial Navigation	15	---	80%
Navigation - Chart Plot	15	15	90%
Navigation - Terrestrial	10	10	90%
Navigation General	70	60	70%
Deck General	70	70	70%
Deck Safety and Environmental Protection	70	70	70%

b. The written examination may include questions on the following topics: Celestial Navigation (ocean licenses only); Terrestrial Navigation; Electronic Navigation and Position System; Echo Sounders; Magnetic and Gyro-compasses; Steering Control Systems; Meteorology; Watchkeeping, including Bridge Resource Management and Voyage Planning; Radar Navigation; Emergency Procedures; Search and Rescue; Visual Signaling; Ship Handling; Cargo Handling and Stowage; Pollution Prevention; Ship Stability; Fire Fighting and Fire Prevention; Life Saving; Medical Aid; and IMO Conventions concerning Safety of Life at Sea.

10. USER FEES. Applicants must pay the appropriate user fees set forth in 46 CFR 10.109.

11. RAISE OF GRADE OR INCREASE IN SCOPE. The following paragraphs include the professional requirements for an applicant seeking a raise of grade, extension of route, or increase in a tonnage limitation of his or her existing license. In situations occurring before 1 February 2002, that are not provided for below, the policies and procedures of the former licensing scheme still apply.

a. Effective 1 February 2002, an applicant who holds a 500 GRT license and STCW certification that were issued based on the former licensing scheme and who applies for a 1,600 GRT license and certification must:

- (1) Meet the sea service requirements of 46 CFR 10.414 or 10.416;
- (2) Complete the practical assessments; and
- (3) Pass the written examination.

b. Effective 1 February 2002, an applicant who holds a near coastal license and STCW certification and applies for an increase in scope to an ocean route at the same tonnage level must:

- (1) Complete the assessments of skills related to celestial navigation; and
- (2) Pass the written examination module for celestial navigation.

c. Effective 1 February 2002, an applicant who holds either a 500 GRT or 1,600 GRT license and STCW certification that were issued based on service before 1 August 1998 and who now applies for a third mate's license must:

- (1) Acquire the supplemental sea service required by 46 CFR 10.402 and 10.407;
- (2) Complete the assessments of skills; and
- (3) Pass the written examination.

d. An applicant who holds either a 500 GRT or a 1,600 GRT license and STCW certification that were based on service that began on or after 1 August 1998 and wishes to apply for a third mate's license must acquire the sea service required by 46 CFR 10.402 and 10.407. No further testing or assessments are required.

e. Effective 1 February 2002, a third mate who was licensed based on service before 1 August 1998 and who applies for a second mate's license, must:

(1) Complete the practical assessments related to celestial navigation using bodies other than the sun;

(2) Acquire the sea service required by 46 CFR 10.406. For raise in grade to second mate, certain shoreside service may be accepted under the provisions of 46 CFR 10.211; and

(3) Pass the second mate's examination from the former licensing scheme.

f. A third mate who was licensed based on service that began on or after 1 August 1998 and applies for a second mate's license is only required to acquire the additional sea service required by 46 CFR 10.406. Under the provisions of 46 CFR 10.406, certain shoreside employment may be accepted to meet the sea service requirements. No further testing or assessments are required.



**STCW 95**  
**OFFICER IN CHARGE OF A NAVIGATIONAL WATCH ON SHIPS**  
**OF 500 GT OR MORE**  
**AFTER FEBRUARY 1, 2002**

NAME: \_\_\_\_\_ DATE OF APPLICATION: \_\_\_\_\_

SOCIAL SECURITY#: \_\_\_\_\_ DATE OF APPROVAL: \_\_\_\_\_

Clerk	Eval	GENERAL REQUIREMENTS	Reference
		1. Passport photo	
		2. Current license or document	
		3. 18 years old	
		4. Basic Safety Training a. Personal survival techniques b. Fire fighting c. First aid d. Personal safety and social responsibility	
		5. GMDSS	
		6. Have approved seagoing service of not less than three years.	
		7. Letter attesting to 6 months of bridge watchkeeping duties under the supervision of the Master or a qualified officer.	
		8. Have completed approved education and training and present the following approved course completion certificates: a. Navigation; b. Electronic navigation; c. Compasses; d. Steering control systems; e. Meteorology; f. Watchkeeping; g. Radar; h. ARPA i. Emergency procedures; j. Search and rescue; k. Ship Handling; l. Cargo handling; m. Stability; n. Advanced firefighting; o. Lifesaving; p. Medical first aid.	
		9. Have completed all practical assessment control sheets for OICNW	

QUALIFICATION AS A SHIPBOARD ASSESSOR AND ASSESSING APPLICANTS  
FOR AN STCW-95 CERTIFICATE

1. A candidate for any license authorizing service as a mate of vessels of 500 or more GT (200 GRT) must demonstrate his or her ability to perform the professional tasks listed in enclosure (3). Satisfactory completion of these tasks must be witnessed by a shipboard assessor who uses the performance standards set forth in enclosure (4) or alternative performance standards that have been approved by the Coast Guard.

2. To serve as a shipboard assessor for assessment of an applicant's practical demonstrations of skill, a mariner must read the publication *CONDUCTING MARINER ASSESSMENTS: A Practical Manual for Assessors*. This 13-page document is available on the World Wide Web at <http://www.uscg.mil/hq/g-m/marpers/pag/assessors.pdf>. A shipboard assessor who witnesses a practical assessment must sign the assessment standard and indicate that he or she has read and followed the guidance in the manual. A shipboard assessor who has read this document and uses the assessment standards [enclosure (4)] will ensure a fair, standardized assessment of an applicant's ability to competently perform the assessed task.

3. The assessment standards identify those skills in the STCW Code Table A-II/1 that must be demonstrated, establish the conditions under which the assessment must occur, the performance or behavior the candidate must demonstrate, and the standards against which the performance or behavior must be measured. After a candidate has successfully completed a demonstration of a skill, the shipboard assessor should complete the information at the bottom of the applicable assessment standard.

4. Certain licensed officers serving on board ship may serve as a shipboard assessor of applicants for these licenses. The prospective shipboard assessor must be employed on the vessel serving as the platform for the demonstrations and hold either:

- a. An STCW certificate at the management level (master or chief mate); or
- b. An STCW certificate as an officer in charge of a navigational watch and a second mate's license.

In either case, he or she must comply with the requirements set forth in paragraph 2 above.

5. The vessel upon which the assessments are performed must be fitted out with the equipment pertaining to the assessments. Simulation is not permitted unless specifically authorized by enclosure (4). For example, if a gyro compass is required to perform a demonstration, a magnetic compass may not be used to simulate a gyro compass.

**Record of Completion of Practical Assessments  
OFFICER IN CHARGE OF A NAVIGATIONAL WATCH**

STCW Competence	Knowledge, Understanding and Proficiency (KUP)	Assessments		For Coast Guard use
		Number	Task	
Plan and conduct a passage and determine position	<b>Celestial Navigation</b> Ability to use celestial bodies to determine the ship's position	OICNW-1-1A	Adjust a sextant	
		OICNW-1-1B	Measure the altitude of the sun	
		OICNW-1-1C	Measure the altitude of at least 3 stars	
		OICNW-1-1D	Measure the altitude of the sun at meridian passage (local apparent noon)	
		OICNW-1-1E	Celestial running fix	
		OICNW-1-1F	Star fix	
	<b>Terrestrial and Coastal Navigation</b> Ability to determine the ship's position by use of: Landmarks, and aids to navigation, including lighthouses, beacons, and buoys  Ability to determine the ship's position by use of: Marine Radar  Ability to determine the ship's position by use of: Dead Reckoning  Ability to determine the ship's position by use of: Set and Drift  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	OICNW-1-2A	Fix by two bearings	
		OICNW-1-2B	Fix by two ranges	
		OICNW-1-2C	Fix by tangents to two identified objects	
		OICNW-1-2D	Plot the ship's DR position	
		OICNW-1-2E	Determine the course to steer	
		OICNW-1-3A	Correction of charts and publications	
		OICNW-1-3B	Chart selection	
		OICNW-1-3C	Route planning	

STCW Competence	Knowledge, Understanding and Proficiency (KUP)	Assessments		For Coast Guard use
		Number	Task	
Plan and conduct a passage and determine position	<i>Electronic systems of position fixing and navigation</i> -- Ability to determine the ship's position by use of electronic navigational aids	OICNW-1-4A	Position fix by GPS	
		OICNW-1-4B	Use of GPS position save function	
		OICNW-1-4C	Position fix by loran	
		OICNW-1-4D	Use of echo sounder	
	<i>Echo Sounders</i> -- Ability to operate the equipment and apply the information correctly	OICNW-1-5A	Determine gyro compass error by bearing of range	
		OICNW-1-5B	Determine magnetic compass error	
	<i>Magnetic &amp; Gyro Compass</i> -- Ability to determine errors of the magnetic and gyro-compasses, using terrestrial means, and to allow for such errors	OICNW-1-5C	Determine magnetic compass deviation	
		OICNW-1-5D	Determine course to steer by magnetic compass	
		OICNW-1-5E	Position fix by magnetic compass bearings	
	<i>Magnetic &amp; Gyro Compass</i> -- Ability to determine errors of the magnetic and gyro-compasses, using terrestrial means, and to allow for such errors	OICNW-1-5F	Azimuth of the sun	
		OICNW-1-5G	Azimuth of any body at night	
	<i>Steering Control Systems</i> -- Adjustment of controls for optimum performance	OICNW-1-6A	Steering gear test	
		OICNW-1-6B	Set weather controls	

STCW Competence	Knowledge, Understanding and Proficiency (KUP)	Assessments		Coast Guard use
		Number	Task	
Plan and conduct a passage and determine position	<i>Meteorology</i> -- Ability to use and interpret information obtained from on-board meteorological instruments	OICNW-1-7A	Read barometric pressure	
		OICNW-1-7B	Determine true wind speed and direction	
		OICNW-1-7C	Determine expected weather conditions	
Maintain a safe navigational watch	<i>Watchkeeping</i> -- Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea	OICNW-2-1A	Identify light configurations	
		OICNW-2-1B	Identify day shapes	
		OICNW-2-1C	Identify sound signals	
		OICNW-2-1D	Determine risk of collision	
		OICNW-2-1E	Maneuver to avoid risk of collision -- meeting	
		OICNW-2-1F	Maneuver to avoid risk of collision -- overtaking	
		OICNW-2-2A	Watch Relief	
		OICNW-2-2B	Keep a safe navigation watch	
		OICNW-2-2C	Notify Master when appropriate	
<i>Watchkeeping</i> -- Thorough knowledge of the principles to be observed in keeping a safe watch		OICNW-2-2D	Keep a safe anchor watch	
		OICNW-2-2E	Navigate in restricted visibility	
		OICNW-2-2F	Turn over a watch	
		OICNW-2-3A	Voyage planning	
		OICNW-2-3B	Execute a voyage plan	

STCW Competence	Knowledge, Understanding and Proficiency (KUP)	Assessments		Coast Guard use
		Number	Task	
Maintain a safe navigational watch	<i>Watchkeeping</i> -- Thorough knowledge of effective bridge teamwork procedures	OICNW-2-3C	Watch augmentation	
		OICNW-2-3D	BRM Condition III – collision avoidance	
		OICNW-2-3E	BRM Condition III – navigation	
		OICNW-2-3F	BRM Condition II or III – error trapping	
		OICNW-2-3G	BRM Condition II or III – prioritization	
		OICNW-2-3H	BRM Condition II – establish a bridge team	
		OICNW-3-1A	Set up and maintain radar display	
		OICNW-3-1B	Switch display modes	
Use of radar and ARPA to maintain the safety of navigation	<i>Radar Navigation</i> -- Ability to operate and to interpret and analyze information obtained from radar, including Performance -- setting up and maintaining displays  <i>Radar Navigation</i> -- 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	OICNW-3-1C	Identify false echoes, sea return, racons and SARTs	
		OICNW-3-1D	Determine range and bearing	
Use of radar and ARPA to maintain the safety of navigation	<i>Radar Navigation</i> -- 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			

STCW Competence	Knowledge, Understanding and Proficiency (KUP)	Assessments		Coast Guard use
		Number	Task	
Use of radar and ARPA to maintain the safety of navigation	<p><i>Radar Navigation</i> -- Identification of critical echoes; detecting course and speed changes of other ships; effective changes of own ship's course and speed</p> <p><i>Radar Navigation</i> -- Identification of critical echoes; detecting course and speed changes of other ships; effective changes of own ship's course and speed; and, application of International Regulations for Preventing Collisions at Sea</p> <p><i>Radar Navigation</i> -- plotting techniques and relative and true motion concepts</p> <p><i>Radar Navigation</i> – parallel indexing</p> <p>Principal types of ARPA, display characteristics, performance standards and the dangers of over-reliance on ARPA</p> <p>Ability to operate, to interpret and to analyze information from ARPA, including: system performance and accuracy; tracking capabilities and limitations; processing delays; use of operational warnings; and system tests</p>	OICNW-3-1E	Determine risk of collision	
		OICNW-3-1F	Determine DRM, SRM, CPA, and TCPA	
		OICNW-3-1G	Detect speed and course changes of other ships	
		OICNW-3-1H	Change course to control target DRM	
		OICNW-3-1I	Change speed to control target DRM	
		OICNW-3-1J	Determine true course and speed of target vessels	
		OICNW-3-1K	Parallel indexing	
		OICNW-3-2A	Set up and maintain an ARPA display	
		OICNW-3-2B	Manual target acquisition	
		Use of radar and	Ability to operate and to interpret and	

STCW Competence	Knowledge, Understanding and Proficiency (KUP)	Assessments		Coast Guard use		
		Number	Task			
ARPA to maintain the safety of navigation	analyze information obtained from ARPA, including: methods of target acquisition and their limitations  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  Ability to operate and to interpret and analyze information obtained from ARPA, including: deriving and analyzing information, critical echoes, exclusion areas and trail maneuvers	OICNW-3-2C	Establish an exclusion area			
		OICNW-3-2D	Set vector characteristics			
		OICNW-3-2E	Designate targets			
		OICNW-3-2F	Cancel targets			
		OICNW-3-2G	Target History			
		OICNW-3-2H	Establish CPA and TCPA			
		OICNW-3-2I	Establish alarm area			
		OICNW-3-2J	Trial Maneuver			
		OICNW-3-2K	Switch stabilization modes			
		OICNW-3-2L	Navigation lines			
		OICNW-3-2M	Determine set and drift			
		Transmit and receive information by visual signaling	<i>Visual Signaling</i> -- Ability to transmit and receive signals by Morse code	OICNW-4-1A	Flashing light	
				OICNW-5-1A	Maneuver for man overboard	
Maneuver the ship	<i>Ship maneuvering and handling</i> -- Maneuvering and procedures for the rescue of person overboard  <i>Ship maneuvering and handling</i> -- Basic maneuvering	OICNW-5-1B	Course change of more than 45°			
		OICNW-5-1C	Emergency stop			



## Assessment 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 were removed in the following order:
  - a. Perpendicularity;
  - b. Side error;
  - c. Parallelism; and
  - d. Collimation error.
2. The remaining index error was less than 0.5 minutes of arc.

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	

# Assessment 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 was within  $\pm 0.5$  minutes of arc, after correction for index error, as compared with the altitude measured by the designated examiner at the same time; and,
2. The time was within  $\pm 2$  second of UTC at the time of observation as determined by the designated examiner.

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	

# Assessment 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 was within  $\pm 0.5$  minutes of arc, after correction for index error, as compared with the altitude measured by the designated examiner at the same time; and,
2. The time was within  $\pm 2$  seconds of UTC at the time of observation as determined by the designated examiner.

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

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Mariner

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SSN No.

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Date

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Assessor (sign and print name)

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License No.

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MMD No.

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Position

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Vessel or Training Course

# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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 was within  $\pm 0.5$  minutes of arc, after correction for index error, as compared with the altitude measured by the designated examiner at meridian passage.

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

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Mariner

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SSN No.

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Date

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Assessor (sign and print name)

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License No.

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MMD No.

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Position

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Vessel or Training Course

# Assessment 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, and times of three observations of the sun, and a standard plotting sheet appropriate for the dead reckoning position

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

**PERFORMANCE STANDARD:**

The position of the running fix was within 1 nm of the designated examiner'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	

# Assessment 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 a standard plotting sheet appropriate for the dead reckoning position

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

**PERFORMANCE STANDARD:**

The position of the star fix was within 1 nm of the designated examiner's solution.

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

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Mariner

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SSN No.

\_\_\_\_\_  
Date

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Assessor (sign and print name)

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License No.

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MMD No.

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Position

\_\_\_\_\_  
Vessel or Training Course

# Assessment 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, plot them, and determine the position.

**PERFORMANCE STANDARD:**

1. The position was within  $\pm .1$  nm of the designated examiner's position.
2. The crossing angles of bearings were not less than  $30^\circ$  and not more than  $150^\circ$ .
3. The bearings of objects abeam or close to the beam were observed first.
4. The chart in use was 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	

# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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 was within  $\pm .1$  nm of the designated examiner'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	



# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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, plot them, and determine the position.

**PERFORMANCE STANDARD:**

The position was within  $\pm .1$  nm of the designated examiner's position.

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

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Mariner

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SSN No.

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Date

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Assessor (sign and print name)

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License No.

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MMD No.

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Position

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Vessel or Training Course

## Assessment of Competence

### OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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 was within  $\pm 1$  nm of the designated examiner's position.

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

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Mariner

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SSN No.

\_\_\_\_\_  
Date

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Assessor (sign and print name)

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License No.

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MMD No.

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Position

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Vessel or Training Course

# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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 was within  $\pm 5^\circ$  of the designated examiner'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	

## Assessment 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 were identified.
2. Corrections were correctly made to the affected charts and publications.
3. All corrections were 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 the publication correction card (or the publication correction spreadsheet).

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

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Mariner

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SSN No.

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Date

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Assessor (sign and print name)

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License No.

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MMD No.

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Position

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Vessel or Training Course

# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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, and the appropriate chart catalog

**PERFORMANCE BEHAVIOR:** Identify the charts needed for the voyage.

**PERFORMANCE STANDARD:**

1. The names and numbers of the charts were correctly identified and recorded.
2. The charts selected were the largest scales appropriate for the area transited.
3. There was no gap in chart coverage for any portion of the voyage requiring coastal navigation or departure and arrival at any port.

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	

# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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.
3. The courses were plotted on the appropriately scaled charts noting the ETA at each way point, including the final way point.

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

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Mariner

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SSN No.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Assessor (sign and print name)

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License No.

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MMD No.

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Position

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Vessel or Training Course

## Assessment 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 a full mission ship simulator, or in a navigation laboratory, using a GPS receiver which meets IMO performance standards.

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

**PERFORMANCE STANDARD:**

1. The system was initialized.
2. The indicators of position accuracy were 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	

# Assessment 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 a full mission ship simulator, or in a navigation laboratory, using a GPS 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 was saved or recorded within one minute of hearing "Man Overboard."

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	



# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

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

**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: Loran

**TASK:** Position fix by loran

**PERFORMANCE CONDITION:** On a ship underway, or a full mission ship simulator, or in a navigation laboratory, using a loran receiver which meets NMEA performance standards

**PERFORMANCE BEHAVIOR:** Initialize a loran receiver, determine the ship's position, and evaluate the accuracy of that position.

**PERFORMANCE STANDARD:**

1. The receiver was turned on.
2. The appropriate station pair was selected.
3. The lat/long or TDs were read and plotted correctly within .1 nm of the designated examiner's position on a chart with a scale of no more than 1:150,000.
4. The accuracy of the fix was evaluated using system and receiver limitations and TD crossing angles.

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	

# Assessment 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 the manufacturer's recommendations.
3. The correct GMT was 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.
5. The sensitivity was adjusted to obtain proper depth reading on the display and correct trace on the paper (if fitted).

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	

# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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 was compared to the charted bearing.
2. The compass error was determined and properly labeled.
3. The solution was  $\pm .5^\circ$  of the designated examiner'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	

# Assessment 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 was compared to the corrected gyro heading (corrected for a known gyro error).
2. The magnetic compass error was determined and properly labeled.
3. The solution was  $\pm .5^\circ$  of the designated examiner's solution.
4. The error was correctly recorded in the compass record.

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	

## Assessment of Competence

### OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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 information

**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 was compared to the charted range bearing.
2. The magnetic compass error was determined and properly labeled.
3. Variation was determined from the chart.
4. The deviation solution was  $\pm .5^\circ$  of the designated examiner's solution.
5. The deviation was 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.

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Mariner

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SSN No.

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Date

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Assessor (sign and print name)

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License No.

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MMD No.

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Position

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Vessel or Training Course

# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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 and a chart that includes variation information

**PERFORMANCE BEHAVIOR:** Determine the compass error and apply it to the true course to determine the course to steer by magnetic compass to make good the intended true course.

**PERFORMANCE STANDARD:**

1. Compass error was correctly applied to the magnetic course.
2. The solution was  $\pm 1^\circ$  of the designated examiner'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	

## Assessment of Competence

### OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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 a full mission ship simulator, or in a navigational laboratory, and given a deviation table and a navigational chart of the area

**PERFORMANCE BEHAVIOR:** Apply the compass error to the bearings by magnetic compass of at least two charted objects and plot them to determine the position.

**PERFORMANCE STANDARD:**

1. Compass error was correctly applied to the magnetic bearings.
2. The position was within  $\pm .5$  nm of the designated examiner'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	

# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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 was read when the repeater was level.
2. The time of the reading noted.
3. The true azimuth of the sun for the time of the reading was determined.
4. The gyrocompass azimuth was compared to the true azimuth and the gyro error was determined.
5. The solution was  $\pm .5^\circ$  of the designated examiner'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	



## Assessment of Competence

### OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**ASSESSMENT NO.** OICNW-1-5G

**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 any body at night

**PERFORMANCE CONDITION:** On a ship underway at night, and using a standard azimuth circle

**PERFORMANCE BEHAVIOR:** Read the gyro-compass bearing of any body and determine gyro compass error.

**PERFORMANCE STANDARD:**

1. The azimuth of the body was read when the repeater was level.
2. The time of the reading was noted.
3. The true azimuth of the body for the time of the reading was determined.
4. The gyrocompass azimuth was compared to the true azimuth and the gyro error was determined.
5. The solution was  $\pm .5^\circ$  of the designated examiner'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	

# Assessment of Competence

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

**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 was turned on.
2. The steering gyro repeater was aligned with the master gyro-compass.
3. After the required warm up period, the controls for switching pumps and motors between the port and starboard steering systems were tested.
4. Both port and starboard steering systems were tested as follows:
  - a. When the control was switched to hand steering, the rudder was tested throughout its full range of motion.
  - b. When the control was switched to non follow-up, the rudder was tested throughout its full range of motion.

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	

## Assessment of Competence

### OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

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

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	

# Assessment 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 and given a barometer

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

**PERFORMANCE STANDARD:**

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

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	

# Assessment 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:**

1. The apparent wind speed and direction was converted to true wind speed and direction.
2. The candidate's solution was within one point for direction and five knots for speed.

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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Position

\_\_\_\_\_  
Vessel or Training Course