Transport Canada Transports Canada

TP 2293E
(XX/2019)

QUALIFICATIONS FOR THE CERTIFICATION OF SEAFARERS

REVISION 8

Month year

Dated April 12, 2019

TC-XXXXXXX
TC-1001891

Canada

Responsible Authority	Approval
The Executive Director, Marine Personnel Standards and Pilotage is responsible for this document, including any change, correction, or update.	Elisabeth Bertrand Executive Director, Marine Personnel Standards and Pilotage Marine Safety

Original Date Issued: 1998 **Date Revised: [insert date]**

TP 2293E
(03/2016)

TC-XXXXXX

DOCUMENT INFORMATION			
Title	**The Examination and Certification of Seafarers**		
TP No.	**2293 E**	**Revision**	**6**
Catalogue No.		**ISBN/ISSN**	
Originator	Marine Personnel Standards and Pilotage (AMSP) Tower B, Place de Ville 112 Kent St., Suite 450 Ottawa, Ontario - K1A 0N5	**Telephone** **Fax** **E-mail** **URL**	613 991-3120 613 990-1538 MarineSafety@tc.gc.ca http://www.tc.gc.ca/MarineSafety

REVISIONS

Last Review

Next Review

Revision No.	Date of Issue	Affected Pages	Author(s)	Brief Description of Change
1	April 1999	All	AMSP	Complete revision of the publication
2	September 2002	All	AMSP	Complete revision of the publication
3	December 2002	All	AMSP	Complete revision of the publication
4	August 2004	All	A. Giguère	Complete revision of the publication
5	July 2007	All	Capt. D. Couture / B. Duguay	Complete revision of the publication
6	March 2016		Capt. M. Lavoie	Revision of Examination Syllabuses

Table of Contents

Chapter 1 – General

1.1 Reference to Act and Regulations

1. The *Marine Personnel Regulations 2019* were made by the Governor in Council under sections, 35 and 100 of the *Canada Shipping Act, 2001*, in order to specify the crewing and certification requirements on board vessels.
2. Section 16 of the Act provides for the Minister to specify the manner Canadian Maritime Documents (including certificates of competency) are issued, and to set the examinations a person must undergo in order to obtain such a certificate. Section 17 provides for the Minister to specify the period of validity of every maritime document.

1.2 Purpose

The purpose of this publication is to establish specifications of a technical nature to complete the conditions and requirements set out in the CSA 2001 and MPR 2019 in respect of issuance of certificates of competency and are intended to be read in conjunction with the Regulations

1.3 Related reference material

International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978.

1.4 Definitions

Qualifying service - means service credited to an applicant in order for them to meet the experience requirements for a certificate or an endorsement issued under Part 1 of the Marine Personnel Regulations, 2019. (*service admissible*)

Sea service - means service credited to an applicant in order for them to meet the experience requirements for a certificate or an endorsement issued under Part 1 1 of the Marine Personnel Regulations, 2019.. (*service admissible*)

Chapter 2 – Sea Service Requirements - Assessment of Qualifying Service

Reference to regulations

3. The conditions for granting certification to a seafarer encompass training, experience and examinations. The experience component is measured by qualifying service. Qualifying service is assessed in terms of the amount of service acquired and, for service on board vessels (i.e. sea service), the types of vessel on which the seafarer has served and the types of voyage made. Qualifying service is as important to the certification process as the assessment of training and the marking of examinations. The amount and type of qualifying service required for a particular certificate is set out in the *Marine Personnel Regulations, 2019;* it represents the time which is judged, to be sufficient to acquire the experience needed for the certificate in question.

4. Sea Service performed on foreign vessels Sea service is assessed on its technical merits. To establish the nature of any period of service, the examiner may be required to review the articles of agreement, the official logbooks and the seafarer's discharge book.All foreign-issued documents evidencing service which are in languages other than English or French must be translated into English or French, and evidence of authenticity must be provided in respect of these documents.

Calculation of sea service

5. Time onboard is calculated from the date of engagement to the date of discharge. Service done before or after the articles of agreement (if any) are opened or closed can be accepted only if relevant for the certificate applied for.

6. Periods of sea service on a vessel or on more than one vessels cannot overlap. A service day counted on one voyage or vessel cannot be counted on another voyage or vessel.

7. The day an applicant signs on and the day he signs off may be credited as no more than one day in total, unless the actual hours of work for those days justify otherwise and are confirmed by the master, the authorized representative or the training institution.

8. Any relevant service that meet the requirements of the Marine Personnel Regulations 20XX, whether on regularly scheduled shifts or on overtime may be accepted.

9. Sea service claimed at a different rate than 8 hours per day will be recognized only with substantiation in the form of testimonials, with the exception of a request from an applicant serving as a "Cadet" or trainee, in which case each day of training onboard will not count as more that one day of service. The same rule will apply when a cadet or trainee, during his sea phase, is temporarily designated to serve in a different capacity, for example as a rating forming part of a navigational watch and the time spent in the other capacity will only count as one day onboard equal one day of service.

Absence from vessel

10. Where shore leave is taken or where a seafarer is otherwise absent during a period of engagement (i.e. while he is on the vessel's articles), only the days worked aboard the vessel are accepted as sea service.

Service on shifts

11. Where service is performed on on the basis of alternance of shifts onboard and rest period ashore, only service on board the vessel is accepted as sea service, at the appropriate rate depending on the number of hours worked onboard per day.

12. Where service is performed on a self-propelled mobile offshore unit (MOU) in transit, the time spent on board the MOU is to be counted as full time. Time on an MOU which is on station for the purpose of petroleum exploration or production will be calculated in accordance with sections 3.20 to 3.22.

Calculating service using days spent at sea

13. Section 105 of the *Marine Personnel Regulations, 2019*, specifies: "The sea service that a person must acquire to obtain or renew a certificate of competency or a certificate of proficiency or to obtain an endorsement is the time spent by the person on board a vessel and includes service while the vessel is in port, loading or unloading, at anchor, in refit or in dry-dock, which service forms part of a voyage, or any other service specified in *TP 2293* that would allow the person to meet the experience requirement for obtaining or renewing the certificate or endorsement."

14. This means that service in refit or in dry-dock can be accepted if such service was done when the seafarer was already on the vessel when the vessel went for refit or in dry-dock or if he joined a vessel in refit or in dry-dock, he remains onboard when the vessel sails on its voyage. In other words, a seafarer serving on a vessel accomplishing voyages should not be penalized if his vessel has to stay in port for a long period to load or unload, at anchor, or if his vessel goes for refit or goes to dry-dock during his period of employment. This also means that a person cannot accumulate sea service only on a vessel in refit or in dry-dock.

15. On the other hand, when an applicant acquires sea service on a vessel (including an MOU, subject to sections 3.20 and 3.21) that is engaged in commercial activities other than the carriage of passengers or the handling of cargo, or that spends prolonged periods alongside, in dry-dock or under repairs, the sea service will be calculated based on the number of days during which the vessel is under way as follows:
    a) Service will be credited at the rate of one and a half times the number of days during which the vessel is under way and proportionally to the number of hours worked per day below or in excess of 8 hours, that number not exceeding 12 and the total number of days of credited service not exceeding the total number of days served on board times the number of hours worked per day divided by 8.
    b) The table below may be used to calculate the service referred to in a).

Table I

Julian date sign-off (+365 if year is later than sign-on year)		_____ (i)
Julian date sign-on		– _____ (ii)
Total number of days signed on	(i) minus (ii)	_____ (A)
Total number of days underway	(from testimonials)	_____ (B)
Total numbers of hours worked per day ($x \leq 12$)	(from testimonials)	_____($x \leq 12$)
(A)_____ × 1.5 = (C)_____	and (B)_____ × (x/8) × 1.5 = (D)_____	
Select the lesser of (C) or (D)	Total credit	_____

Provisions Concerning Voyages

Service Agreements

Service on vessels not maintaining agreements with the crew

16. Where service has been performed on vessels where no agreements with the crew were maintained, a satisfactory testimonial of service must be produced, signed by the master, the chief engineer or the authorized representative of the vessel and certified by a credible person who has knowledge of the facts to be established.

17. When an applicant is the master/owner of his boat, unless his sea service can be certified by a credible person who has knowledge of the facts to be established, the applicant should get his sea service testimonials sworned before a commissioner of oaths.

Evidence of service on foreign vessels

18. Testimonials of service for seafarers serving on vessels registered abroad may have to be confirmed by the appropriate government or by some other recognized authority of the country in which the vessel is registered, or the testimony of some credible person who has knowledge of the facts to be established. Such testimonials may be certificates of discharge authenticated by a consul or other official before whom the seafarer was discharged, or by letters from the authorized representative of the vessel.

Positions Held during Sea Service

Service performed to obtain nautical certificate

19. Except as stated in the sections that follow, sea service must have been performed in the deck department.

Rank or rating

20. The rank or rating held by an applicant during a voyage will always be taken as that appearing in the agreement with the crew for that voyage.

21. Sea service while occupying non-traditional positions such as QMED, MUC, MUCKER, GP, etc., will count only in that proportion of time spent doing deck department service. In this case, the master or authorized representative should indicate on sea service testimonials the actual functions occupied onboard and the proportion or percentage of time while carrying out deck or watchkeeping duties.

Promotion of cadets

22. If a cadet engaged in an approved program is temporarily employed during his onboard training as an able seafarer, a watch rating or any other capacity that is relevant for the certificate of competency sought, then the service in that capacity will be accepted as cadet service, if the cadet meets the training objectives of his program and completes his training record book.

Service as pilot

23. Actual time served on board a vessel as a pilot will be accepted as watchkeeping service but only up to a maximum of half of the service required for any one certificate, if the service otherwise meets the voyage class requirement of the MPR.

Service in the Canadian Armed Forces (CAF)

Nautical certificates

24. Time served on board CAF vessels as an officer or a rating will be accepted for nautical certificates if the time was spent on upper-deck duties, on the following conditions:

    a) The statement of service is authenticated by Canadian Forces Headquarters, Ottawa, and specifies days at sea during the period served.
    b) The applicant produces a testimonial signed by his/her commanding officer or naval officer-in-charge attesting to the proportion of time generally spent each day performing regular deck duties in addition to other duties.
    c) Where application is being made to take an examination for a certificate requiring watchkeeping service, a watchkeeping certificate is produced, signed by the commanding officer if the service was performed on a vessel with a complement of at least 150 persons, or by the naval officer-in-charge or commanding officer of a flotilla or parent vessel if the service was performed on a small craft, classified as such by the CAF. In addition, evidence is produced to show that the service was performed while holding the required certificate.

25. If an applicant was not employed in bridge or seamanship duties, service will be credited to the applicant in accordance with the provisions of this chapter. In the case of applicants employed in trades with a percentage of time spent on deck duties, information provided by the Department of National Defence will be used to assess the service that can be accepted for nautical certificates.

26. The following table II indicates the proportion of time spent on upper deck duties by ratings in the various trades in the Canadian Navy. This rate is to be applied to the applicant's qualifying service for a deck certificate.

Table II

Trade	Rate
Airboatswain	Nil
Boatswain	100%
Clearance Diver	75%
Firecontrolman	75%
Hull Technician/Mechanic	25%
Meteorological Technician	50%
Radar Plotter	75%
Radioman Sea	30%
Ships duties – Administrative	25%
Ships duties – Pay	25%
Signalmen	90%
Sonar Man	75%
Storesmen – Victualling	25%
Storesmen – Naval	25%
Weaponman, Surface	75%
Weaponman, Underwater	75%

Service in the Offshore Resource Industry

Service for MOU certificates

27. Service on mobile offshore units (MOUs) is accepted in full for the purpose of obtaining a certificate specific to MOUs, subject if applicable, to the rule on the number of hours worked other than eight hours in a calendar day, set out in subsection 105(2) of the *Marine Personnel Regulations 2019*, and limitations with regard to the type of MOU, set out in sections 177 to 183 of those Regulations. For the purpose of interpretation of IMO Resolution A.1079(28).

Service for nautical certificates

28. Those serving on self-propelled mobile offshore units (MOUs), including mobile offshore drilling units (MODUs), either in transit or maintaining position by means of thrusters or dynamic positioning, will accrue sea service at the same rate as the one applicable for vessels other than MOUs. In these cases, conventional descriptions of the position in which the applicant has served will be relied on.

29. Service on surface MOUs not maintaining position by means of dynamic positioning, or on non self-propelled units, will be assessed in accordance with Table III.

Table III

Certificate Applied for	Position served in	Qualifying Service Rate	Maximum Qualifying Service
Bridge Watch Rating or Able Seafarer deck	Deckhand, Roustabout, Roughneck, Crane Operator, Crane Operator Assistant or any position listed below that is applicable to a Watchkeeping Mate certificate	Full	No limit

Watchkeeping Mate or Watchkeeping Mate, Near Coastal	Toolpusher, Nightpusher, Driller, Assistant Driller, Derrickman, Derrickman Assistant, Crane Operator, Crane Operator Assistant, Deckhand, Roughneck, Roustabout, Ballast Control Operator, Radio Operator, Dynamic Positioning System Operator, Tourpusher, Ice Observer	2/3	30 months
Master 500 Gross Tonnage ; or Master, 500 Gross Tonnage, Near Coastal	The following watchkeeping officers: Ballast Control Operator, Dynamic Positioning System Operator or Stability Technician, while holding a Watchkeeping Mate or a Watchkeeping Mate, Near Coastal, or a Master, 3000 Gross Tonnage, Domestic, or a Master, 500 Gross Tonnage, Domestic certificate	2/3	6 months
Chief Mate or Chief Mate, Near Coastal	The following watchkeeping officers: Ballast Control Operator, Dynamic Positioning System Operator or Stability Technician, while holding a Watchkeeping Mate or a Watchkeeping Mate, Near Coastal certificate	2/3	6 months
Master Mariner, Master, Near Coastal; Master 3000 Gross Tonnage; or Master 3000 Gross Tonnage, Near Coastal	The following watchkeeping officers: Ballast Control Operator, Dynamic Positioning System Operator, Barge Supervisor or Stability Technician, while holding a Watchkeeping Mate or a Watchkeeping Mate, Near Coastal certificate	2/3	30 months

30. Service on self-elevating units will be assessed in accordance with Table IV.

Table IV

Certificate Applied for	Position served in	Qualifying Service Rate	Maximum Qualifying Service
Bridge Watch Rating or Able seafarer deck	Deckhand, Roustabout, Roughneck, Crane Operator, Crane Operator Assistant or any position listed below, applicable to the Watchkeeping Mate certificate	Full	No limit
Watchkeeping Mate or Watchkeeping Mate, Near Coastal	Toolpusher, Nightpusher, Derrickman, Derrickman Assistant, Crane Operator, Crane Operator Assistant, Deckhand, Roughneck, Roustabout, Radio Operator, Driller, Assistant Driller, Barge Supervisor Trainee, Tourpusher	2/3	12 months
Watchkeeping Mate or Watchkeeping Mate, Near Coastal	Barge Supervisor	2/3	18 months

Service for engineering certificates

31. Those serving on self-propelled MOUs which are in transit, or MOUs maintaining position by means of thrusters or dynamic positioning, or with thrusters of propulsion machinery in stand-by mode, will accrue sea service in accordance with Table V. In these cases, conventional descriptions of the position in which the applicant has served will be relied on.

Table V

Certificate Applied for	Position served in	Qualifying Service Rate	Maximum Qualifying Service
Engine Room Rating	Motorman, Oiler	Full	No limit
Engine Room Rating	Electrician/Electrical Technician, Roustabout, Mechanic, Wiper, Mechanical technician	Full	3 months or, in the case of the holder of an ERR training certificate, 4 months
Fourth-Class Engineer, Motor Ship	Roustabout, Roughneck, Crane Operator	Full	12 months
Fourth-Class Engineer, Motor Ship	Motorman, Oiler, Assistant Engineer, Engineer	Full	No Limit
Fourth-Class Engineer, Motor Ship	Sub-Sea engineer, Assistant Sub-Sea Engineer, Electrician/Electrical Technician, Mechanic, Mechanical Technician	Full	24 months
Third-Class Engineer, Motor Ship	Engineer in charge of the watch while holding a Fourth-Class Certificate	Full	No limit
Third-Class Engineer, Motor Ship	Motorman/Oiler/Engine Room Rating performing watchkeeping duties in an engine room while holding a Fourth-Class Certificate	1/3	6 months
Second-Class Engineer, Motor Ship	Engineer in charge of the watch or the machinery while holding a Fourth-Class Certificate or Third-Class Certificate	Full	No limit
First-Class Engineer, Motor Ship	Engineer in charge of the watch or the machinery while holding a Second-Class Certificate	Full	No limit

32. Service acquired on Stationary MOUs, self-elevating MOUs or surface MOUs with no form of propulsion where the unit is functioning on location will be assessed in accordance with Table VI.

Table VI

Certificate Applied For	Position Served In	Qualifying Service Rate	Maximum Qualifying Service
Engine Room Rating	Motorman, Mechanic, Oiler, Wiper, Electrician/Electrical Technician, Roustabout, Mechanical Technician	Full	3 months or, in the case of the holder of an ERR training certificate, 4months
Fourth-Class Engineer, Motor Ship	Roustabout, Roughneck, Crane Operator	Full	12 months

Certificate Applied For	Position Served In	Qualifying Service Rate	Maximum Qualifying Service
Fourth-Class Engineer, Motor Ship	Electrician/Electrical Technician, Mechanic, Hydraulic Technician, Mechanical Technician	Full	24 months
Fourth-Class Engineer, Motor ship	Motorman/ Oiler/ Assistant Engineer/ Engineer	Full	No limit
Third-Class Engineer, Motor Ship	Engineer in charge of the watch while holding a Fourth-Class Certificate (except in the case of a Motorman or Engine-room Rating performing watchkeeping duties in an engine room while holding a Fourth-Class Certificate, for whom the qualifying service rate will be 1/3)	1/2	6 months
Second-Class Engineer, Motor Ship	Engineer in charge of the watch while holding a Fourth-Class Certificate	1/2	12 months
Second-Class Engineer, Motor Ship	Engineer in charge of the watch or the machinery while holding a Third-Class Certificate	1/2	6 months
First-Class Engineer, Motor Ship	Engineer in charge of the watch or the machinery while holding a Second-Class Certificate	1/2	6 months

Other Service

Approved training programs

33. In the case of an approved cadet training program, an applicant who leaves the program before completion is credited for the sea service they have performed onboard vessels when they were in the program. Furthermore, if at the time he left the program he had successfully completed courses that replace examinations, he is credited for these examinations. In all cases, an attestation from the recognized institution must be provided to the examiner.

Service on ACVs

34. Sea service on an ACV must be recorded in the seafarer's discharge book, certified pilot logbook or a testimonial signed by the executive officer of the company or ACV unit who has full knowledge of the service. The applicant must submit those documents, along with the *Statement of Qualifying Service* form, when claiming sea service.

35. Service on an ACVwill be accepted based on the following table of equivalency between all up weight and length overall or tonnage:

MPR minimum required length or gross tonnage	Corresponding ACV minimum all up weight
8,5 metres in LOA	1 000 kg
12,0 metres in LOA	4 500 kg
18,0 metres in registered lenght	10 000 kg
24,0 metres in registered lenght	50 000 kg
500 Gross Tonnage	100 000 kg

Watchkeeping Service

Service as Master or Chief Officer

36. Sea service as master, while the holder of one of the certificates required by the MPR 2019 for that position, is accepted as watchkeeping sea service.

37. Sea service as non-watchkeeping chief officer, as staff captain or in a similar capacity (equivalent titles sometimes used on foreign vessels or within a company), while holding the required certificate, is accepted as watchkeeping sea service provided that:
    a) the applicant participated in the actual manoeuvring of the vessel;
    b) the applicant supervised a watch for a total of at least 30 hours a month; and
    c) a signed testimonial by the master to the above effect is produced, to the satisfaction of the examiner.

Sea Service as Chief Engineer or Second Engineer

38. Sea Service as chief engineer, while holding the required certificate, is accepted as watchkeeping sea service.

39. Sea Service as first assistant engineer, as senior engineer (titles equivalent to second engineer sometimes used on foreign vessels or within a company), or as second engineer on day work, while holding the required certificate, is accepted as watchkeeping sea service provided that the engineer supervised a watch for a total of at least 30 hours a month in the engine room, including time while the vessel was manoeuvring. A testimonial signed by the chief engineer to this effect must be presented to the examiner.

Chapter 3 – Qualifications for Master and Mates Certificates of Competency

General

3.1 Ability to Steer

The applicant for a certificate of competency for which the qualification "Ability to Steer" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successfully completes an approved steering course, or
2. Submits to the Minister a steering testimonial which contains the following information:

    1) Name and address of vessel owner
    2) Information on the vessel:
        (a) name
        (b) port of registry
        (c) official number /IMO number
        (d) gross tonnage
        (e) vessel type
    3) Name and candidate number (CDN) of seafarer
    4) Position occupied onboard
    5) Date seafarer signed on
    6) Date seafarer signed off
    7) Description of voyage/service
    8) The following declaration signed and dated by the master:

        "I certify that the above-named seafarer has performed navigational watchkeeping functions including service at the wheel during his service under my command and I am satisfied that the seafarer is competent to steer the ship and comply with helm orders."

3.2 Communications (COM)

The applicant for a certificate of competency for which the qualification "Communications (COM)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program,
2. Successful completion of an approved training course in Communications, or
3. Obtain a 70 percent grade or more on the TC examination on Communications (COM).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/1 of the STCW Code, as associated with that competence.

Competence	**Knowledge, Understanding and Proficiency**
- Use the IMO Standard Marine Communication Phrases - Transmit and receive information by visual signalling	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 of the STCW.

3.3 Chartwork and Navigation Safety (C&NS)

The applicant for a certificate of competency for which the qualification "Chartwork and Navigation Safety (C&NS)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Chartwork and Navigation Safety, or
2. Obtain a 70 percent grade or more on the TC examination on Chartwork and Navigation Safety (C&NS).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the following tasks, duties and responsibilities to maintain a safe navigational watch.

Competence	Knowledge, Understanding and Proficiency
Maintain a safe navigational watch	The candidate must have acquired the following knowledge, understanding and proficiency: - Practical understanding of chart construction and knowledge of the information displayed on charts - Practical knowledge of publications found in the wheelhouse of a fishing vessel of less than 24 metres in length overall - Ability to determine the vessels position and plot the position on the chart and the ability to plot the true course between two positions. - Practical knowledge of record keeping - Practical understanding of magnetic variation and deviation - Practical knowledge and understanding of the International Regulations for Preventing Collisions at Sea with Canadian Modifications. - Practical understanding of principles to be observed in keeping a navigational watch on board a fishing vessel of less than 24 metres in length overall

3.4 Chartwork & Pilotage, Level 1 (C&P 1)

The applicant for a certificate of competency for which the qualification "Chartwork and Pilotage, Level 1 (C&P 1)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Chartwork and Pilotage, Level 1, or
2. Obtain a 70 percent grade or more on the TC examination on Chartwork and Pilotage, Level 1 (C&P 1).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
Plan and conduct a coastal passage and determine position	The candidate must have acquired the following knowledge, understanding and proficiency:

	- Knowledge of principles of construction of the different types of charts and their use -Thorough knowledge of and ability to use publications - Ability to determine the ship's position by use of: 1. landmarks 2. aids to navigation, including lighthouses, beacons and buoys 3. dead reckoning, taking into account winds, tides, currents and estimated speed -Keeping a log book and a record of compass errors

3.5 Chartwork & Pilotage, Level 2 (C&P 2)

The applicant for a certificate of competency for which the qualification "Chartwork and Pilotage, Level 2 (C&P 2)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program,
2. Successful completion of an approved training course in Chartwork and Pilotage, Level 2, or
3. Obtain a 70 percent grade or more on the TC examination on Chartwork and Pilotage, Level 2 (C&P 2).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 and A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
Table A-II/1 Plan and conduct a passage and determine position **Table A-II/2** -Determine and allow for compass errors -Determine position and the accuracy of resultant position fix by any means	The candidate must have acquired the knowledge, understanding and proficiency listed in: Column 2 of table **A-II/1** of the STCW Code as it pertains to: *Terrestrial and coastal navigation*, and ability to determine errors of the magnetic and gyro‑compasses, using terrestrial means, and to allow for such errors Column 2 of table **A-II/2** of the STCW Code as it pertains to: -Ability to determine and allow for errors of the magnetic and gyro‑compasses -Position determination in all conditions 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

3.6 Celestial Navigation, Level 1 (ASTRO 1)

The applicant for a certificate of competency for which the qualification "Celestial Navigation, Level 1 (ASTRO 1)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Celestial Navigation, Level 1, or
2. Obtain a 70 percent grade or more on the TC examination on Celestial Navigation, Level 1 (ASTRO 1).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/1 of the STCW-F Code, as associated with that competence

Competence	Knowledge, Understanding and Proficiency
	The candidate must have acquired the knowledge,

Determine position and the accuracy of resultant position fix by any means	understanding and proficiency listed in column 2 of table A-II/1 of the STCW: Position determination by celestial observations

3.7 Celestial Navigation, Level 2 (ASTRO 2)

The applicant for a certificate of competency for which the qualification "Celestial Navigation, Level 2 (ASTRO 2)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program,
2. Successful completion of an approved training course in Celestial Navigation, Level 2, or
3. Obtain a 70 percent grade or more on the TC examination on Celestial Navigation, Level 2 (ASTRO 2).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 and A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
Table A-II/1 Plan and conduct a passage and determine position **Table A-II/2** -Plan a voyage and conduct navigation - Determine position and the accuracy of resultant position fix by any means	The candidate must have acquired the knowledge, understanding and proficiency listed in: Column 2 of table **A-II/1** of the STCW Code as it pertains to *celestial navigation*, and ability to determine errors of the magnetic and gyro‑ compasses, using celestial means, and to allow for such errors Column 2 of table **A-II/2** of the STCW Code as it pertains to: -Voyage planning and navigation for all conditions by acceptable methods of plotting ocean tracks -Position determination in all conditions by celestial observations

3.8 Navigation Systems & Instruments (NS & I)

The applicant for a certificate of competency for which the qualification "Navigation Systems & Instruments (NS&I)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program that offers the Navigation Systems & Instruments (NS&I) as an optional subject of the cadet program,
2. Successful completion of an approved training course in Navigation Systems & Instruments, *or*
3. Obtain a 70 percent grade or more on the TC examination on Navigation Systems & Instruments (NS&I).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/2 of the STCW Code, as associated with that competence

Competence	Knowledge, Understanding and Proficiency
- Determine position and the accuracy of resultant position fix by any means	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code as it pertains to:

-Determine and allow for compass errors	-Position determination in all conditions 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 -Ability to determine and allow for errors of the magnetic and gyro‑ compasses -Knowledge of the principles of magnetic and gyro‑ compasses An understanding of systems under the control of the master gyro and a knowledge of the operation and care of the main types of gyro‑ compass

3.9 Electronic Positioning Systems (EPS)

The applicant for a certificate of competency for which the qualification "Electronic Position Systems (EPS)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program,
2. Successful completion of an approved training course in Electronic Positioning Systems, or
3. Obtain a 70 percent grade or more on the TC examination on Electronic Positioning Systems (EPS).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/1 of the STCW Code, as associated with that competence; and use of radar and ARPA to maintain safety of navigation.

Competence	Knowledge, Understanding and Proficiency
- Plan and conduct a passage and determine position	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 of the STCW Code as it pertains to: *-Electronic systems of position fixing and navigation* *-Echo-sounders* *-Compass – magnetic and gyro* *-Steering control system*
- Use of radar and ARPA to maintain safety of navigation	*Radar navigation* -Knowledge of the fundamentals of radar and automatic radar plotting aids (ARPA) -Ability to operate and to interpret and analyse information obtained from radar, including the following: Performance, including: .1 factors affecting performance and accuracy .2 setting up and maintaining displays .3 detection of misrepresentation of information, false echoes, sea return, etc., racons and SARTs

3.10 Navigation Safety, Level 1 (NS 1)

The applicant for a certificate of competency for which the qualification "Navigation Safety, Level 1 (NS 1)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program, or
2. Obtain a 70 percent grade or more on the TC examination on Navigation Safety, Level 1 (NS 1).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Maintain a safe navigational watch	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 of the STCW Code as it pertains to *watchkeeping* specific to the following elements: - Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972, as amended (including Canadian modifications) - Thorough knowledge of the Principles to be observed in keeping a navigational watch

3.11 Navigation Safety, Level 2 (NS 2)

The applicant for a certificate of competency for which the qualification "Navigation Safety, Level 2 (NS 2)" is required can demonstrate that they meet that requirement by obtaining a 70 percent grade or more on the TC examination on Navigation Safety, Level 2 (NS 2).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
Establish watchkeeping arrangements and procedures	The candidate must have acquired the knowledge, understanding and proficiency necessary to undertake the tasks, duties and responsibilities listed in column 2 of table A-II/2 of the STCW Code.

3.12 Meteorology, Level 1 (MET 1)

The applicant for a certificate of competency for which the qualification "Meteorology, Level 1 (MET 1)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program,
2. Successful completion of an approved training course in Meteorology, Level 1, or
3. Obtain a 70 percent grade or more on the TC examination on Meteorology, Level 1 (MET 1).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 and A-II/3 of the STCW Code and table A-II/2 and A-II/3 of the STCW-F Code, as associated with that competence; and use of radar and ARPA to maintain safety of navigation.

Competence	Knowledge, Understanding and Proficiency

Plan and conduct a passage and determine position	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 and A-II/3 of the STCW Code and table A-II/2 and A-II/3 of the STCW-F Code as it pertains to *Meteorology*.

3.13 Meteorology, Level 2 (MET 2)

The applicant for a certificate of competency for which the qualification "Meteorology, Level 2 (MET 2)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program offering the Meteorology, Level 2 (MET 2) as an optional subject of the cadet program,
2. Successful completion of an approved training course in Meteorology, Level 2, or
3. Obtain a 70 percent grade or more on the TC examination on Meteorology, Level 2 (MET 2).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 and A-II/2 of the STCW Code and table A-II/2 of the STCW-F Code, as associated with that competence; and use of radar and ARPA to maintain safety of navigation.

Competence	Knowledge, Understanding and Proficiency
Table A-II/1 of the STCW Code Plan and conduct a passage and determine position	The candidate must have acquired the knowledge, understanding and proficiency listed in:
Table A-II/2 of the STCW Code Forecast weather and oceanographic conditions	Column 2 of table **A-II/1** of the STCW Code as it pertains to *meteorology* Column 2 of table **A-II/2** of the STCW Code as it pertains to: -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 -Knowledge of the characteristics of various weather systems, including tropical revolving storms and avoidance of storm centres and the dangerous quadrants -Knowledge of ocean current systems
Table A-II/1 of the STCW-F Code Forecast weather and oceanographic conditions	-Use all appropriate nautical publications on tides and currents Column 2 of table **A-II/1** of the STCW-F Code as it pertains to *Meteorology and oceanography* specific to the following elements .1 knowledge of Meteorological instruments and their application .2 ability to apply meteorological information available .3 knowledge of characteristics of various weather systems,

	including, at the discretion of the Party, tropical revolving storms and avoidance of storm centres and the dangerous quadrants .4 knowledge of weather conditions, such as fog, [icebergs, ice accretion and freezing spray] liable to endanger the vessel

3.14 Ship Management, Level 1 (SM 1)

The applicant for a certificate of competency for which the qualification "Ship Management, Level 1 (SM 1)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Ship Management, Level l, or
2. Obtain a 70 percent grade or more on the TC examination on Ship Management, Level l (SM 1).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 and A-II/3 of the STCW-F Code, as associated with that competence; and use of radar and ARPA to maintain safety of navigation.

Competence	Knowledge, skill and understanding
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and the protection of the marine environment	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 and A-II/3 of the STCW-F Code

3.15 Ship Management, Level 2 (SM 2)

The applicant for a certificate of competency for which the qualification "Ship Management, Level 2 (SM 2)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Ship Management, Level 2, or
2. Obtain a 70 percent grade or more on the TC examination on Ship Management, Level 2 (SM 2).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, skill and understanding
Monitor compliance with legislative requirements	The candidate must have acquired the knowledge, understanding and proficiency listed is column 1 of this table: -Knowledge of the *Canada Shipping Act,2001*, *Marine Personnel Regulations, 2019*, *Pilotage Act* and *Canada Labour Code, Part II* -Knowledge of Ship's business -Knowledge of Canadian marine regulations -Knowledge of master's responsibilities in different events

3.16 Ship Management, Level 3 (SM 3)

The applicant for a certificate of competency for which the qualification "Ship Management, Level 3 (SM 3)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program offering the Ship Management, Level 3 (SM 3) as an optional subject of the cadet program,
2. Successful completion of an approved training course in Ship Management, Level 3, or
3. Obtain a 70 percent grade or more on the TC examination on Ship Management, Level 3 (SM 3).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/2 of the STCW Code, as associated with that competence; monitor compliance with Canadian marine legislation and regulations and knowledge of master's responsibilities in different Marine Occurrences

Competence	Knowledge, skill and understanding
Table A-II/2 Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and the protection of the marine environment	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code.
Monitor compliance with Canadian marine legislation and regulations Knowledge of master's responsibilities in different marine occurrences	The candidate must have acquired the knowledge, understanding and proficiency listed in column 1 of this table.

3.17 Ship Management, Level 4 (SM 4)

The applicant for a certificate of competency for which the qualification "Ship Management, Level 4 (SM 4)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Ship Management, Level 4, or
2. Obtain a 70 percent grade or more on the TC examination on Ship Management, Level 4 (SM 4).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/2 of the STCW Code, as associated with that competence; and knowledge of Canadian national legislation respecting marine vessel operation and safety.

Competence	Knowledge, skill and understanding
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and the protection of the marine environment.	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code.
Knowledge of Canadian national legislation respecting marine vessel operation and safety.	The candidate must have acquired the knowledge, understanding and proficiency listed in column 1 of this table to *monitor and control compliance with legislative requirements*.

3.18 Ship Construction and Stability, Level 1 (SCS 1)

The applicant for a certificate of competency for which the qualification "Ship Construction and Stability, Level 1 (SCS 1)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Ship Construction and Stability, Level 1, or
2. Obtain a 70 percent grade or more on the TC examination on Ship Construction and Stability, Level 1 (SCS 1).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/2 and A-II/4 of the STCW-F Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Maintain seaworthiness of the ship	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 and A-II/4 of the STCW-F Code.

3.19 Ship Construction and Stability, Level 2 (SCS 2)

The applicant for a certificate of competency for which the qualification "Ship Construction and Stability, Level 2 (SCS 2)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Ship Construction and Stability, Level 2, or
2. Obtain a 70 percent grade or more on the TC examination on Ship Construction and Stability, Level 2 (SCS 2).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 and A-II/3 of the STCW-F Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Control trim and stability	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 and A-II/3 of the STCW-F Code.

3.20 Ship Construction and Stability, Level 3 (SCS 3)

The applicant for a certificate of competency for which the qualification "Ship Construction and Stability, Level 3 (SCS 2)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Ship Construction and Stability, Level 3, or
2. Obtain a 70 percent grade or more on the TC examination on Ship Construction and Stability, Level 3 (SCS 3).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/3 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Maintain seaworthiness of the ship	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/3 of the STCW Code.

3.21 Ship Construction and Stability, Level 4 (SCS 4)

The applicant for a certificate of competency for which the qualification "Ship Construction and Stability, Level 4 (SCS 2)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program,
2. Successful completion of an approved training course in Ship Construction and Stability, Level 4, or
3. Obtain a 70 percent grade or more on the TC examination on Ship Construction and Stability, Level 4 (SCS 4).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table A-II/1 and A-II/2 of the STCW Code: **Table A-II/1, column 1** -Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks -Maintain seaworthiness of the ship	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 and A-II/2 of the STCW Code.
Table A-II/2, column 1	
-Assess reported defects and damage to cargo spaces, hatch covers and ballast tanks and take appropriate action -Control trim, stability and stress	

3.22 Ship Construction and Stability, Level 5 (SCS 5)

The applicant for a certificate of competency for which the qualification "Ship Construction and Stability, Level 5 (SCS 5)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Ship Construction and Stability, Level 5, or
2. Obtain a 70 percent grade or more on the TC examination on Ship Construction and Stability, Level 5 (SCS 5).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
The candidate must be competent to undertake	The candidate must have acquired the knowledge, understanding

the tasks, duties and responsibilities listed in column 1 of table A-II/2 of the STCW Code:	and proficiency listed in column 2 of table A-II/2 of the STCW Code.
-Assess reported defects and damage to cargo spaces, hatch covers and ballast tanks and take appropriate action	
-Control trim, stability and stress	

3.23 Cargo, Level 1 (CG 1)

The applicant for a certificate of competency for which the qualification "Cargo, Level 1 (CG 1)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Cargo, Level 1, or
2. Obtain a 70 percent grade or more on the TC examination on Cargo, Level 1 (CG 1).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/3 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Monitor the loading, stowage, securing and unloading of cargoes and their care during the voyage	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/3 of the STCW Code .

3.24 Cargo, Level 2 (CG 2)

The applicant for a certificate of competency for which the qualification "Cargo, Level 2 (CG 2)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program,
2. Successful completion of an approved training course in Cargo, Level 2, or
3. Obtain a 70 percent grade or more on the TC examination on Cargo, Level 2 (CG 2).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 and A-II/3 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Table A-II/1 Monitor the loading, stowage, securing, care during the voyage and the unloading of cargoes **Table A-II/2** -Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes -Carriage of dangerous goods	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 and A-II/2 taking into account paragraph 5 of section A-II/2 of the STCW Code.

3.25 Cargo, Level 3 (CG 3)

The applicant for a certificate of competency for which the qualification "Cargo, Level 3 (CG 3)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program,
2. Successful completion of an approved training course in Cargo, Level 3, or
3. Obtain a 70 percent grade or more on the TC examination on Cargo, Level 3 (CG 3).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 and A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Table A-II/1 Monitor the loading, stowage, securing, care during the voyage and the unloading of cargoes **Table A-II/2** -Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes -Carriage of dangerous goods	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 and A-II/2 of the STCW Code.

3.26 Engineering Knowledge, Level 1 (EK 1)

The applicant for a certificate of competency for which the qualification "Engineering Knowledge, Level 1 (EK 1)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Engineering Knowledge, Level 1, or
2. Obtain a 70 percent grade or more on the TC examination on Engineering Knowledge, Level 1 (EK 1).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Operate remote controls of propulsion plant and engineering systems and services	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 taking into account paragraph 5 of section A-II/2 of the STCW Code.

3.27 Engineering Knowledge, Level 2 (EK 2)

The applicant for a certificate of competency for which the qualification "Engineering Knowledge, Level 2 (EK 2)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program offering the Engineering Knowledge, Level 2 (EK 2) as an optional subject of the cadet program,
2. Successful completion of an approved training course in Engineering Knowledge, Level 2, or
3. Obtain a 70 percent grade or more on the TC examination on Engineering Knowledge, Level 2 (EK 2).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Operate remote controls of propulsion plant and engineering systems and services	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code.

3.28 General Ship Knowledge, Level 1 (GSK 1)

The applicant for a certificate of competency for which the qualification "General Ship Knowledge, Level 1 (GSK 1)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in General Ship Knowledge, Level 1 (GSK 1), or
2. Obtain a 70 percent grade or more on the TC examination on General Ship Knowledge, Level 1 (GSK 1).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/3 of the STCW-F Code, as associated with that competence.

Competence	Knowledge, skill and understanding
-Fishing vessel power plants -Catch hanling and stowage -Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and the protection of the marine environment	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/3 of the STCW-F Code.

3.29 General Ship Knowledge, Level 2 (GSK 2)

The applicant for a certificate of competency for which the qualification "General Ship Knowledge, Level 2 (GSK 2)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in General Ship Knowledge, Level 2 (GSK 2), or
2. Obtain a 70 percent grade or more on the TC examination on General Ship Knowledge, Level 2 (GSK 2).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/1 of the STCW-F Code, as associated with that competence.

Competence	Knowledge, skill and understanding
-Fishing vessel power plants	The candidate must have acquired the knowledge, understanding

-Catch hanling and stowage -Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and the protection of the marine environment	and proficiency listed in column 2 of table A-II/1 of the STCW-F Code.

3.30 General Ship Knowledge, Level 3 (GSK 3)

The applicant for a certificate of competency for which the qualification "General Ship Knowledge, Level 3 (GSK 3)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program,
2. Successful completion of an approved training course in General Ship Knowledge, Level 3 (GSK 3), or
3. Obtain a 70 percent grade or more on the TC examination on General Ship Knowledge, Level 3 (GSK 3).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 and A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Table A-II/1 -Ensure compliance with pollution prevention requirements -Monitor compliance with legislative requirements **Table A-II/2** Maintain safety and security of the ship's crew and passengers and the operational condition of life-saving, fire-fighting and other safety systems	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of the following tables of the STCW Code: **Table A-II/1** **Table A-II/2**, specific to the following element: Thorough knowledge of life‑saving appliance regulations (International Convention for the Safety of Life at Sea)

3.31 General Ship Knowledge, Level 3D (GSK 3D)

The applicant for a certificate of competency for which the qualification "General Ship Knowledge, Level 3D (GSK 3D)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in General Ship Knowledge, Level 3D (GSK 3D), or
2. Obtain a 70 percent grade or more on the TC examination on General Ship Knowledge, Level 3D (GSK 3D).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, skill and understanding
-Ensure compliance with pollution-prevention requirements	The candidate must have acquired the knowledge, understanding and proficiency: -Knowledge of the precautions to be taken and equipment used

-Monitor compliance with legislative requirements	to prevent pollution of the marine environment -Knowledge of the pollution prevention requirements as contained in the Canadian Regulations -Knowledge of the *Canada Shipping Act, 2001* -Knowledge of Canadian Regulations and vessels documentation -Knowledge of management of personnel -Knowledge of Part II of the *Canada Labour Code* and *Maritime Occupational Health and Safety Regulations*

3.32 Simulated Electronic Navigation – Limited (SEN-L)

The applicant for a certificate of competency for which the qualification "Simulated Electronic Navigation – Limited (SEN-L)" is required can demonstrate that they meet that requirement by successfully completing an approved training course in Simulated Electronic Navigation – Limited.
The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, skill and understanding
	The candidate must have acquired the knowledge, understanding and proficiency:

Operate navigational equipment on a seasonal vessel in sheltered waters	General knowledge of:
	- RADAR basic functions, operating procedures, errors and radar navigation and collision avoidance
	- Electronic systems for navigation and watchkeeping such as
	  - GPS and DGPS
	  - Echo Sounder
	  - AIS
	- Marine compasses and compass Errors
	- Vessel Manoeuvres
	- Electronic Charting Systems (ECS) advantages and disadvantages, errors and use for passage planning
	- Use of smart phones and tablets for passage Planning

Maintain watchkeeping standards	General knowledge of: - Principles of watchkeeping and watchkeeping standards - Company and Master's orders and bridge records - Resource management, communications, allocation of resources fatigue and stress - Situational Awareness and leadership - Procedures related to various vessel emergencies

3.33 Simulated Electronic Navigation – Domestic (SEN-D)

The applicant for a certificate of competency for which the qualification "Simulated Electronic Navigation – Domestic (SEN-D)" is required can demonstrate that they meet that requirement by successfully completing an approved training course in Simulated Electronic Navigation – Domestic.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, skill and understanding
	The candidate must have acquired the knowledge, understanding and proficiency:

Operate electronic navigation systems and instrument typically found onboard coastal vessels	General knowledge of:
	- RADAR basic functions, symbols, controls, operating procedures, errors and radar navigation and collision avoidance
	- RADAR plotting for collision avoidance
	- Electronic systems for navigation and watchkeeping such as
	  - E-Loran
	  - GPS and DGPS
	  - Echo Sounder
	  - AIS
	- Marine compasses and compass Errors
	- Vessel Manoeuvres
	- Electronic Charting Systems (ECS) advantages and disadvantages, errors and use for passage planning
	- Use of smart phones and tablets for passage Planning

Maintain watchkeeping standards	General knowledge of: - Principles of watchkeeping and watchkeeping standards - Company and Master's orders and bridge records - Resource management, communications, allocation of resources fatigue and stress - Situational Awareness and leadership - Procedures related to various vessel emergencies

3.34 Simulated Electronic Navigation – Operational Level (SEN-O)

The applicant for a certificate of competency for which the qualification "Simulated Electronic Navigation – Operational Level (SEN-O)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Simulated Electronic Navigation – Operational Level, or
2. Simulated Electronic Navigation – Refresher (SEN-REF) if the SEN-O course was previously passed.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that

he or she has acquired the knowledge, understanding and proficiency described in table A-II/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
- Plan and conduct a passage and determine position	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 of the STCW Code as it pertains to: - *Terrestrial and coastal navigation* - *Electronic systems of position fixing and navigation* - *Echo-sounders* - *Compass – magnetic and gyro* - *Steering control system*
- Maintain a safe navigational watch - Use of radar and ARPA to maintain safety of navigation - Respond to a distress signal at sea - Use the IMO Standard Marine Communication Phrases and use English in written and oral form	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 of the STCW Code.

3.35 Simulated Electronic Navigation – Management Level (SEN-M)

The applicant for a certificate of competency for which the qualification "Simulated Electronic Navigation – Management Level (SEN-M)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Simulated Electronic Navigation – Management Level, or
2. Simulated Electronic Navigation – Refresher (SEN-REF) if the SEN-M course was previously passed.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
- Plan a voyage and conduct navigation	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code.
- Determine position and the accuracy of resultant position fix by any means	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code as it pertains to: Position determination in all conditions: - 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

	- 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
- Determine and allow for compass errors - Coordinate search and rescue operations - Establish watchkeeping arrangements and procedures - Maintain safe navigation through the use of information from navigation equipment and systems to assist command decision making	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code.

3.36 Simulated Electronic Navigation – Fishing (SEN-F)

The applicant for a certificate of competency for which the qualification "Simulated Electronic Navigation – Fishing (SEN-F)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Simulated Electronic Navigation – Fishing, or
2. Simulated Electronic Navigation – Refresher (SEN-REF) if the SEN-F course was previously passed.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/2, A-II/3 and A-II/4 of the STCW-F Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Plan and conduct a passage and determine position	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 and A-II/4? of the STCW-F Code as it pertains to: - *Terrestrial and coastal navigation* - *Electronic systems of position fixing and navigation* - *Magnetic and gyro compasses*
- Maintain a safe navigational watch - Use of radar to maintain safety of navigation - Use of radar and ARPA to maintain safety of navigation - Use of ECDIS to maintain safety of navigation	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 and A-II/4? of the STCW-F Code
- Plan a voyage and conduct navigation - Determine position and the accuracy of resultant position fix by any means - Maintain safe navigation through the use of	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/3 of the STCW-F Code By using modern ship electronic navigational aids as provided in fishing vessels

the information from navigation equipment and to assist command decision-making - Maintain the safety of navigation through the use of ECDIS and associated navigation systems to assist command decision making	

3.37 Leadership And Teamwork (LTW)

The applicant for a certificate of competency for which the qualification "Leadership and Teamwork (LTW)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program,
2. Successful completion of an approved training course in Leadership and Teamwork (LTW), or

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Application of leadership and teamworking skills	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 of the STCW Code.

3.38 Leadership And Managerial Skill (LMS)

The applicant for a certificate of competency for which the qualification "Leadership and Managerial Skills (LMS)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program, or
2. Successful completion of an approved training course in Leadership and Managerial Skills (LMS).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Use of leadership and managerial skill	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code.

3.39 Electronic Chart Display and Information Systems (ECDIS)

The applicant for a certificate of competency for which the qualification "Electronic Chart Display and Information Systems (ECDIS)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved deck cadet program, or
2. Successful completion of an approved training course in Electronic Chart Display and Information Systems (ECDIS).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 and A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Table A-II/1 of the STCW Code: Use of ECDIS to maintain the safety of navigation	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 of the STCW Code.
Table A-II/2 of the STCW Code: Maintain the safety of navigation through the use of ECDIS and associated navigation systems to assist command decision making	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code.

3.40 General Seamanship for MM-Oral, MNC-Oral, M3000-Oral, M3000NC-Oral, CM-Oral, CMNC-Oral, M500-Oral and M3000D-Oral:

Master Mariner (MM-Oral)
Master, Near Coastal (MNC-Oral)
Master 3000 Gross Tonnage (M3000-Oral)
Master 3000 Gross Tonnage, Near Coastal (M3000NC-Oral)
Chief Mate (CM-Oral)
Chief Mate, Near Coastal (CMNC-Oral)
Master 500 Gross Tonnage (M500-Oral)
Master 3 000 Gross Tonnage, Domestic (M3000D-Oral)

The applicant for a certificate of competency for which the qualification "General Seamanship" is required can demonstrate that they obtain a 70 percent grade or more on the TC examination on General Seamanship (MM-Oral), (MNC-Oral), (M3000-Oral), (M3000NC-Oral), (CM-Oral), (CMNC-Oral), (M500-Oral) or (M3000D-Oral), as applicable.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
- Plan a voyage and conduct navigation - Coordinate search and rescue operations - Establish watchkeeping arrangements and procedures - Respond to navigational emergencies - Manoeuvre and handle a ship in all conditions - Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes	- The candidate for a ***Master Mariner*** or ***Chief Mate*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code. - The candidate for a ***Master, Near Coastal*** or ***Chief Mate Near Coastal*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW Code, as it applies to a vessel making a near coastal voyage.

- Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and the protection of the marine environment - Maintain safety and security of the ship's crew and passengers and the operational condition of life-saving, fire-fighting and other safety systems - Develop emergency and damage control plans and handle emergency situations	- The candidate for a ***Master 3000 Gross Tonnage*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 taking into account paragraph 5 of section A-II/2 of the STCW Code as it applies to a vessel of 3000 gross tonnage. - The candidate for a ***Master 3000 Gross Tonnage, Near Coastal*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 taking into account paragraph 5 of section A-II/2 of the STCW Code as it applies to a vessel of 3000 gross tonnge making a near coastal voyage - The candidate for a ***Master 500 Gross Tonnage*** must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 taking into account paragraph 5 of section A-II/2 of the STCW Code and paragraph 2 of Regulation II/3 of the STCW as it applies to a vessel of 3000 gross tonnage - The candidate for a ***Master 3 000 Gross Tonnage, Domestic*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 taking into account paragraph 5 of section A-II/2 of the STCW Code as it applies to a vessel of 3000 gross tonnge making a Domestic Voyage.

3.41 General Seamanship for M500NC-Oral and M500D-Oral:

Master 500 Gross Tonnage, Near Coastal (M500NC-Oral)
Master 500 Gross Tonnage, Domestic (M500D-Oral)

The applicant for a certificate of competency for which the qualification "General Seamanship" is required can demonstrate that they obtain a 70 percent grade or more on the TC examination on General Seamanship (M500NC-Oral) or (M500D-Oral), as applicable.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/3 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
The candidate must be competent to undertake any tasks, duties and responsibilities listed in column 1 of table A-II/3 of the STCW Code.	- The candidate for a ***Master 500 Gross Tonnage, Near Coastal*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/3 of the STCW Code. - The candidate ***Master 500 Gross Tonnage, Domestic*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/3 of the STCW Code as it applies to a vessel making a Domestic voyage.

3.42 General Seamanship for WKM-Oral and WKMNC-Oral:

Watchkeeping Mate (WKM-Oral)
Watchkeeping Mate, Near Coastal (WKMNC-Oral)

The applicant for a certificate of competency for which the qualification "General Seamanship" is required can demonstrate that they obtain a 70 percent grade or more on the TC examination on General Seamanship (WKM-Oral) or (WKMNC-Oral), as applicable.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/1 A-II/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Table A-II/1 of the STCW Code, but more specifically: - Maintain a safe navigational watch - Respond to emergencies - Respond to a distress signal at sea - Use English in written and oral form - Manoeuvre the ship - Monitor the loading, stowage, securing, care during the voyage and the unloading of cargoes - Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks - Ensure compliance with pollution prevention requirements - Prevent, control and fight fires on board - Operate life‑saving appliances - Monitor compliance with legislative requirements	- The candidate for a ***Watchkeeping Mate*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 of the STCW Code. - The candidate for a ***Watchkeeping Mate, Near Coastal*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 of the STCW Code, as it applies to a vessel making a near coastal voyage.
Table A-II/2 of the STCW Code, but more specifically: - Respond to navigational emergencies - Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes - Control trim, stability and stress - Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and the protection of the marine environment - Maintain safety and security of the ship's crew and passengers and the operational condition of life-saving, fire-fighting and	- The candidate for a ***Watchkeeping Mate*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 taking into account paragraph 5 of section A-II/2 of the STCW Code as it applies to a vessel of 3000 gross tonnage. - The candidate for a ***Watchkeeping Mate, Near Coastal*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 taking into account paragraph 5 of section A-II/2 of the STCW Code as it applies to a vessel of 3000 gross tonnage making a near coastal voyage.

other safety systems - Develop emergency and damage control plans and handle emergency situations	

3.43 General Seamanship for M24mD-Oral, CM500D-Oral and CM24mD-Oral:

Master, Vessel of Less Than 24 Metres in Length, Domestic (M24mD-Oral)
Chief Mate 500 Gross Tonnage, Domestic (CM500D-Oral)
Chief Mate, Vessel of Less Than 24 Metres, Domestic (CM24mD-Oral)

The applicant for a certificate of competency for which the qualification "General Seamanship" is required can demonstrate that they obtain a 70 percent grade or more on the TC examination on General Seamanship (M24mD-Oral), (CM500D-Oral) or (CM24mD-Oral), as applicable.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, skill and understanding
Recognize life saving and distress signals and respond to a distress at sea	The candidate must have acquired the following knowledge, understanding and proficiency: - knowledge of the meaning of lifesaving and distress signals - proper actions to be taken when recognizing lifesaving and distress signals The candidate for (**M24mD-Oral**) or(**CM500D-Oral**) must also have acquired the following knowledge, understanding and proficiency: - Knowledge and understanding of the content and application of the IMO *International Aeronautical and Maritime Search and Rescue manual (IAMSAR).*
Plan and conduct safe navigation	Ability to undertake voyage planning, taking into consideration the requirements set out in section A-VIII/2, Part 2 of the STCW Code
Forecast marine weather and apply weather routeing	- Knowledge of the importance of weather forecasts; - Ability to consult weather forecasts; - Take into account weather forecast when making voyage planning; - Take into account actual and forecasted weather before undertaking a voyage and for decision making during the voyage; - Awareness of Environment Canada weather warnings and how they are transmitted
Maintain a Safe Navigational Watch	- Principles to be observed in keeping a navigational watch as set out in the STCW Code, section A-VIII/2, including watchkeeping at anchor and in port; - A thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at sea, 1972 with Canadian Modifications 1983;

	- Knowledge of the Canadian System of buoyage; ability to determine magnetic compass error and care of magnetic compass.
Manoeuvre the ship and use of mooring lines	- Basic knowledge of manoeuvring and handling a small vessel; - The pivoting point and effects when the propulsion system is used in the ahead and astern direction; - Practical manoeuvres for berthing, unberthing, when navigating and for anchoring; - effect of wind, tide and current on manoeuvres - Proper procedures for anchoring and mooring - Names, types, use and care of mooring lines and their characteristics; - Making fast on-shore bollards being used by another ship; - Use of moorings on the bight and doubling up; - Preparation to be made for berthing. The candidate for (**M24mD-Oral**) or(**CM500D-Oral**) must also have acquired the following knowledge, understanding and proficiency: - Towing operations
Respond to emergencies	- Contingency plans for response to emergencies - Knowledge and understanding of the precautions for the protection and safety of passengers in emergency situations
Ensure compliance with pollution-prevention requirements	- Knowledge of the precautions to be taken during fueling; - Knowledge of the statutory requirements to report pollution incidents; - Precautions to be taken to prevent pollution of the marine environment by oil, garbage or other pollutant; - Take appropriate action in response to pollution incidents onboard and found at sea.
Maintain seaworthiness	- Understand the fundamentals of watertight integrity; - Precautions to be taken before the onset of heavy weather such as closing and securing of watertight hatches, manholes, doors and portholes, lowering and securing weights onboard, ensuring that freeing arrangements are functional, etc; - Necessary monitoring on a vessel caught in heavy weather, such as water detection in compartments; - Actions to be taken in case of water ingress or vessel becoming disabled; - Practical considerations of boat handling in heavy weather; - How to prevent ice accretion; - Actions to be taken if ice starts to accumulate on a vessel; - Working knowledge of stability and damaged stability data supplied to small vessels; - Effect on stability of passengers gathering on one side of the vessel; - Understanding of ship’s plans and specifications; - an appreciation of the meaning and characteristics of stiff and tender ships; - effects of reduction in freeboard on stability and seaworthiness.

Monitor compliance with legislative requirements	- Responsibilities and duties of a chief mate, including when joining a vessel; - Knowledge of master's responsibilities under part 2 and 3 of the Marine Personnel Regulations; - Basic knowledge of the regulations concerning life-saving and fire-fighting appliances; - Precautions and requirements for safe embarkation of passengers on a vessel. The candidate for (**M24mD-Oral**) or(**CM500D-Oral**) must also have acquired the following knowledge, understanding and proficiency: - Appreciate master's overall responsibilities; - Duties and responsibilities of the master of a small vessel as required by the Canada Shipping Act; - Master's duties on taking over and relinquishing command; - Preparation of the vessel for inspection and surveys; - Vessels required to have articles of agreements and an official log book; - Initial and subsequent reports to be made in case of a marine occurrence.
The candidate for (**M24mD-Oral**) or(**CM500D-Oral**) must also be competent to undertake the following tasks, duties and responsibilities: Operate small ship plants	The candidate for (**M24mD-Oral**) or(**CM500D-Oral**) must also have acquired the following knowledge, understanding and proficiency: - Basic knowledge of the operation of small ship power plants and auxiliaries, such as the engine, the propulsion system, the fuel, lubrication and cooling systems of the engine, electrical systems, steering gear, bilge pumps, quick shut-off valves, fire dampers; - Basic knowledge of engine surveillance systems and measures to be taken in case of alarm of failure

3.44 General Seamanship for FMUW-Oral and FMLW-Oral:

Fishing Master, Unlimited Waters (FMUW-Oral)
Fishing Master, Limited Waters (FMLW-Oral)

The applicant for a certificate of competency for which the qualification "General Seamanship" is required can demonstrate that they obtain a 70 percent grade or more on the TC examination on General Seamanship (FMUW-Oral) or (FMLW-Oral), as applicable.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/1 of the STCW-F Code, as associated with that competence.

Competence	Knowledge, skill and understanding
- Plan a voyage and conduct navigation - Coordinate search and rescue operations - Establish watchkeeping arrangements and procedures	The candidate for a ***Fishing Master, Unlimited Waters*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/1 of the STCW-F Code.

- Respond to navigational emergencies - Manoeuvre and handle a fishing vessel ~~ship~~ in all conditions - Catch handling and - Control trim and stability - Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and the protection of the marine environment - Maintain safety and security of the ship's crew and passengers and the operational condition of life-saving, fire-fighting and other safety systems	The candidate for a ***Fishing Master, Liimited Waters*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/3 of the STCW-F Code.

3.45 General Seamanship for FOUW-Oral and FOLW-Oral:

Fishing Officer, Unlimited Waters (FOUW-Oral)
Fishing Officer, Limited Waters (FOLW-Oral)

The applicant for a certificate of competency for which the qualification "General Seamanship" is required can demonstrate that they obtain a 70 percent grade or more on General Seamanship (FOUW-Oral) or (FOLW-Oral), as applicable.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-II/2 and A-II/4 of the STCW-F Code, as associated with that competence.

Competence	Knowledge, skill and understanding
- Plan and conduct a passage and determine position - Maintain a safe navigational watch - Respond to a distress signal at sea - Use the IMO Standard Maritime Communication Phrases and use English in written and oral form - Fishing vessel manoeuvring and handling - Catch handling and stowage - Ensure compliance with pollution prevention requirements and the protection of the marine environment - Maintain seaworthiness of the ship - Prevent, control and fight fires onboard - Operate life-saving appliances - Monitor compliance with legislative requirements	The candidate for a ***Fishing Officer, Unlimited Waters*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/2 of the STCW-F Code. The candidate for a ***Fishing Officer, Limited Waters*** certificate of competency must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-II/4 of the STCW-F Code.

3.46 General Seamanship for Fishing Master, 24 Metres, Limited Waters (FM24mLW-Oral)

The applicant for a certificate of competency for which the qualification "General Seamanship for Fishing Master, 24 Metres, Limited Waters (FM24mLW-Oral)" is required can demonstrate that they obtain a 70 percent grade or

more on the TC examination on General Seamanship for Fishing Master, 24 Metres, Limited Waters (FM24mLW-Oral).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, skill and understanding
The candidate must be competent to undertake the following tasks, duties and responsibilities: Recognize life saving and distress signals and proper actions to be taken	The candidate must have acquired the following knowledge, understanding and proficiency: - knowledge of the meaning of lifesaving and distress signals - proper actions to be done when recognizing lifesaving and distress signals
Manoeuvre the vessel	- Basic knowledge of manoeuvring and handling a fishing vessel for berthing, unberthing, during fishing operations, including the effect of wind, tide and current.
Forecast marine weather	- Knowledge of the importance of weather forecasts and ability to consult weather forecasts - The use of weather forecast to plan a voyage or to interrupt fishing activities and return to home port or seek shelter - Awareness of Environment Canada weather warnings and how they are transmitted
Ensure safety	- Practical knowledge of safe working practices aboard fishing vessels - knowledge of the Code of Safe Working Practices as it applies to fishing vessels - awareness of the content and practices described in the Small Fishing Vessel Safety Manual (TP 10038)
Maintain seaworthiness	- Precautions to be taken and monitoring required to ensure watertight integrity in normal operations or before the onset of heavy weather - Actions to be taken in case of water ingress or vessel becoming disabled - Practical considerations of boat handling in heavy weather - How to prevent ice accretion and actions to be taken if ice starts to accumulate on a vessel.
Maintain stability	- Practical use of stability data supplied to fishing vessels - Understanding of ship’s plans and specifications - Knowledge of the effect of adding, removing, transferring, raising, lowering or suspending weights, the free surface effect in tanks - The change of stability during the voyage - Understanding the effects of reduction in freeboard and overloading on stability and seaworthiness. - The dangerous effect of external forces from fishing gear and other gear when catching obstructions on the sea bed or when gear is acting on a high point in the vessel - The use of division bulkheads in fish holds - Effect of carrying fish in bulk - The dangerous effects of carrying fish on deck

	- Effect of water on deck including free surface effect - The effect of ice accretion on stability - Understanding the use, effect and risks of anti-rolling devices such as paravane stabilizers and anti-rolling tanks.
Respond to emergencies	- Master's responsibilities in emergencies such as fire, collision, flooding, grounding, man overboard, vessel's evacuation, etc - rescuing persons and assisting vessel & aircraft in distress
Prevent pollution	- Knowledge of the precautions to be taken during fuelling - Knowledge of the statutory requirements to report pollution incidents - Precautions to be taken to prevent pollution of the marine environment by oil, garbage or other pollutant - Take appropriate action in response to pollution incidents onboard and found at sea.
Ensure compliance with legislative requirements	- Appreciate master's overall responsibilities - Duties and responsibilities of the master of a small vessel as required by the *Canada Shipping Act*.
Maintain a safe navigational watch	- OOW responsibilities, duties and related tasks - Principles to be observed in keeping a navigational watch - Knowledge of the *Collision regulations*

3.47 General Seamanship and stability for Fishing Master, 14 Metres, Limited Waters (FM14mLW-Oral)

The applicant for a certificate of competency for which the qualification "General Seamanship for Fishing Master, 14 Metres, Limited Waters (FM14mLW-Oral)" is required can demonstrate that they obtain a 70 percent grade or more on the TC examination on General Seamanship for Fishing Master, 14 Metres, Limited Waters (FM14mLW-Oral).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, skill and understanding
Recognize life saving and distress signals and proper actions to be taken	The candidate must have acquired the following knowledge, understanding and proficiency: - knowledge of the meaning of lifesaving and distress signals - proper actions to be done when recognizing lifesaving and distress signals
Maintain a safe navigational watch	- Principles to be observed in keeping a navigational watch. - When to call the master. - Demonstrate a practical knowledge of the Collision Regulations and Canadian Buoyage System.
Prevent pollution	Knowledge of applicable regulatory requirements, who to contact in case of release of pollutants and possible consequences - i.e. responsibilities.

Maintain seaworthiness	Practical understanding of the basic types of small fishing vessel construction including common terminology
Maintain stability	Practical appreciation of the principles of fishing vessel stability
Manoeuvre the vessel and use practical seamanship	- Practical knowledge necessary to manoeuvre the vessel - Ability to perform duties required of a or master of a fishing vessel of less than 14 metres or of a mate on a fishing vessel of less than 24 metres in length overall
Protect health and safety of persons onboard and maintain safe working practices	Knowledge of the requirements as prescribed in regulations affecting fishing vessels of less than 24 metres in length overall • Safe Working Practice Regs. • MOHS – Canada labour Code
Forecast marine weather	General knowledge of weather systems, forecasting and sea states, ice charts
Respond to emergencies	Knowledge of proper action to take in the case of an emergency

3.48 Domestic Certificates of Competency (Limited)

The applicant for a certificate of competency for which the qualification "Domestic Certificate of Competency (Limited)" is required can demonstrate that they obtain a 70 percent grade or more on one of the following,

- *General Ship Knowledge Master, Limited – 18 metres in length or more* (CLW ≥ 18 m),
- *General Ship Knowledge Master, Limited – less than 18 metres in length (CLW < 18 m),*
- *General Seamanship Master, Limited – 18 metres in length or more* (CLO ≥ 18 m),
- *General Seamanship Master, Limited – less than 18 metres in length* (CLO < 18 m),
- *General Ship Knowledge Chief Mate, Limited – 18 metres in length or more* (1MLW ≥ 18 m),
- *General Ship Knowledge Chief Mate, Limited – less than 18 metres in length* (1MLW < 18 m),
- *General Seamanship Chief Mate, Limited – 18 metres in length or more* (1MLO ≥ 18 m), or
- *General Seamanship Chief Mate, Limited – less than 18 metres in length* (1MLO < 18 m),

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Item	Competence	Knowledge, understanding and proficiency
1.	Demonstrate a good knowledge of the area for which the certificate will be valid	– Ability to demonstrate that intended route is safe – Knowledge of the places where the depth of water is sufficient for the vessel – Knowledge of sea conditions that may be met in the area of operation and actions to be taken if conditions become too severe – Knowledge of local currents and the effect of tides, if applicable, for the area of operation – Knowledge of the importance of weather forecasts and ability to consult them – Knowledge of the geographical limits of sheltered waters and near coastal waters

Item	Competence	Knowledge, understanding and proficiency
2.	Manoeuvre the vessel	– Capacity to manoeuvre the vessel for berthing, departure from the dock, navigation and anchoring – Manoeuvre to recuperate a person overboard – As applicable, the effect of propellers, rudders, jets and outboard engines when moving ahead and astern and when manoeuvring – Effect of winds and currents when manoeuvring
3.	Operate the propulsion system and all other systems and devices on the vessel	– Knowledge of the principle of operation of the engine and the propulsion system – Knowledge of the use of the propulsion system – Knowledge of the vessel arrangement and of the functioning of all the systems and devices on board, such as the fuel system, lubrication and cooling of the engine, electrical systems, steering gear, bilge pumps, through-hull and drains of cockpit if applicable, quick shut-off valves, fire dampers in ventilation systems – Engine and system monitoring and measures to be taken in case of alarm of failure
4.	Deal with emergency situations	– Be able to identify measures to be taken in emergency situations such as: a) Collision b) Grounding c) Flooding d) Fire e) Injured person or person overboard f) Release of a polluting substance or liquid – Measures to be taken to ensure protection and safety of crew members and passengers in emergency situations – The master's obligation with regard to initial and subsequent reports to be made in case of a marine occurrence – Knowledge and meaning of distress signals as prescribed by appendix IV of the *Collision Regulations* – Measures to be taken to assist a vessel in distress
5.	Prevent and fight fires	– Knowledge of precautions to be taken to prevent fires – Knowledge of precautions to be taken during fuelling – Knowledge of fire-fighting and fire detection equipments – To be able to use all the fire-fighting equipment on the vessel
6.	Moor the vessel and perform related seamanship work	– Knowledge and use of mooring ropes and their use – Knowledge of the various ropes and their uses – Knowledge of the various knots and their uses – Ability to make knots
7.	Prevent pollution	– Knowledge of the precautions to be taken during fuelling – Requirements regarding the *Oil Record Book* – Knowledge of the statutory requirements to report pollution incidents – Knowledge of *Division 5 – Garbage* of the *Prevention of Pollution from Ships and for Dangerous Chemicals Regulations*

Item	Competence	Knowledge, understanding and proficiency
8.	Maintain the vessel's stability	**Vessel < 60GT** – Knowledge of the basic principles of stability – Practical application of stability principles to a vessel – Free surface effect **Vessel ≥ 60GT** – Understanding basic stability terminology – Knowledge of the basic principles of stability – Knowledge of KG, GM and righting lever GZ – Ability to explain using a sketch of a heeled vessel, how the centre of gravity (G) and the centre of buoyancy (B) are acting to create a righting lever (GZ) – Effect on stability of adding, removing, transferring and suspending weights – Stable equilibrium, unstable equilibrium, neutral equilibrium – Maintain watertight integrity – Free surface effect – Practical use of the vessel's stability booklet, in order to evaluate stability in different operating conditions of intact and damaged stability if applicable
9.	Ensure the safety of passengers and use safety and lifesaving equipment	– Knowledge of all the safety and lifesaving equipment on the vessel, such as lifeboats and liferafts, life jackets, lifebuoys, oars, bailers, pumps, anchors and distress flares – Ability to use all the safety and lifesaving equipment on the vessel – Knowledge of the master's and first mate's responsibilities with regard to the safety of crew members and passengers – Ability to conduct boat and fire drills – Understanding of the importance of lifesaving equipment demonstrations and safety instructions given to passengers before sailing – Familiarization of new crew members with the vessel's equipment and safety procedures – Required training before being assigned to any duty on a vessel – Ability to deal with crisis situations and control crowds if applicable – Knowledge of the requirements for gangways
10.	Carry out necessary checks and inspections and t make sure that the vessel has all required certificates and documents	**Vessels subject or not subject to regulatory inspections** – Knowledge of the principal structural members of a vessel and the proper names for the various parts – Checks to be made before departure **In addition, for vessels subject to regulatory inspections** – Preparation for a regulatory inspection – Knowledge of statutory requirements with respect to crewing, inspection of the vessel and required equipment – Knowledge of required documents and certificates, their limits and their validity – Knowledge of requirements for the agreement with the crew, if applicable – Knowledge of record-keeping requirements

Item	Competence	Knowledge, understanding and proficiency
11.	Ensure safe navigation and prevent collisions	**Vessel < 60GT** – Knowledge of the *Collision Regulations*, in particular regarding: Steering and sailing rules Lights and shapes Sound and light signals **In addition, for vessel ≥ 60GT** – Thorough knowledge of content, application and intention of the *Collision Regulations* – Knowledge of the principles to be observed in keeping a navigational watch
12.	Use marine charts and nautical publications to plan and execute a voyage	– Knowledge of and ability to use marine charts, especially with regard to: a) Abbreviations and symbols b) Geographic coordinates (1) Use latitude and longitude to fix a position on the chart (2) Extract the latitude and longitude of a given position on the chart c) The use of magnetic deviation and variation to convert compass bearings into true bearings and to calculate compass courses to be steered to follow a true course d) Determining the position of the vessel on a chart by various means including: (1) Compass bearings (2) Visual ranges (3) Estimated position of the vessel according to its course and speed e) Planning an charting a course to follow a given route f) Determining the direction of a course drawn on a chart g) Properly measure distances on a chart h) The course to steer to counteract the effect of winds and currents – Ability to use and knowledge of the following marine publications: a) Annual edition of notices to mariners b) Tide tables c) Radio aids to marine navigation d) List of lights, buoys and fog signals **In addition, for a vessel ≥ 60T** Knowledge of principles for constructing the various types of charts and their uses
13.	Use the magnetic compass for taking bearings and for steering	– Knowledge of basic magnetic properties in relation to compasses and the Earth's magnetic field – Ability to steer using the compass – Ability to take compass bearings – Ability to use a deviation card or curve – Ability to find the compass deviation **In addition, for a vessel ≥ 60T** Ability to determine errors of the compass using terrestrial means, and to allow for such errors
14.	Use the Canadian Buoyage System	Knowledge of the Canadian buoyage system and ability to: a) Identify buoys b) Situate buoys in the lateral and cardinal system c) Recognize the various buoy lights

Item	Competence	Knowledge, understanding and proficiency
15.	Use radar for navigation safety	– Knowledge of the basic principle of radar and its functioning: a) Start-up procedure b) Function and effect of main commands c) Interpretation of the radar image – Ability to use radar for positioning: a) Identification of radar marks useful for navigation b) Bearing-taking and distance measurement by radar – Ability to use radar as an anti-collision device: a) Evaluation of the risk of collision by observing radar bearings b) Determining the approximate closest distance of approach c) Effect of a change of heading or speed or both on the closest distance of approach
16.	Determine the position of the vessel using electronic navigation aids	– Ability to correctly use all of the following instruments: GPS: a) Starting procedure and functioning of the device b) Correct use of data supplied by the instrument c) Recognizing possible errors, lack of reliability and the need to double check Echo sounder: a) Starting procedure and functioning of the device d) Correct use of data supplied by the instrument
17.	Carry out radio communications	– Knowledge of the categories of vessels on which a VHF transmitter-receiver is required – Knowledge of Coast Guard radio stations and the services they provide – Identify vessels required to report to the various Vessel Traffic Centres – Knowledge of the publication *Radio Aids to Marine Navigation* – The functioning and use of EPIRBs, if applicable – Understanding of the use of MMSI number, if applicable – Use of sailing plans
18.	Carry out towing operations	– Practical knowledge of towing, in particular: a) Cables used for towing and their required length b) The towing point c) Towing bitts and hooks d) The effect of the towing cable on the centre of gravity of the tug and on its stability e) Events that may result in the capsizing of the tug f) Different ways to instantly release the towing cable in an emergency g) Taking and letting go the tow h) The use of an emergency tow line

3.49 Domestic Vessel Safety (MED DVS)

The applicant for a certificate of competency for which the qualification "Domestic Vessel Safety (MED DVS)" is required can demonstrate that they obtain a 70 percent grade or more on the TC examination on Domestic Vessel Safety (MED DVS).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, skill and understanding
Response to marine emergencies on a domestic vessel	The candidate must have acquired the following knowledge, understanding and proficiency: – Basic understanding of the hazards related to a vessel and to the marine environment and of how to prevent shipboard incidents including fire; – Knowledge of the need to raise and react to alarms and deal with emergencies; – Assistance to be provided in fire and abandonment situations; – Knowledge and skills to help own survival and rescue; – Procedures for maintaining emergency equipment according to manufacturer guidelines; – Record-keeping procedures for safety equipment; – Knowledge and skills necessary to keep passengers safe and help them survive an emergency; – Plan, organize and carry out safety drills so the passengers will be aware of safety equipment and procedures.

3.50 Domestic Passenger Vessel Safety (MED DPVS)

The applicant for a certificate of competency for which the qualification "Domestic Passenger Vessel Safety (MED DPVS)" is required can demonstrate that they obtain a 70 percent grade or more on the TC examination on Domestic Passenger Vessel Safety (MED DPVS).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, skill and understanding
Response to marine emergencies on a domestic passenger vessel	The candidate must have acquired the following knowledge, understanding and proficiency: – Basic understanding of the hazards related to a vessel and to the marine environment and of how to prevent shipboard incidents including fire; – Knowledge of the need to raise and react to alarms and deal with emergencies; – Assistance to be provided in fire and abandonment situations; – Knowledge and skills to help own survival and rescue; – Procedures for maintaining emergency equipment according to

	manufacturer guidelines; – Record-keeping procedures for safety equipment; – Knowledge and skills necessary to keep passengers safe and help them survive an emergency; – Plan, organize and carry out safety drills with passengers so the passengers will be aware of safety equipment and procedures.

3.51 Small Non-Pleasure Domestic Vessel Basic Safety (MED SDV-BS)

The applicant for a certificate of competency for which the qualification "Small Non-Pleasure Domestic Vessel Basic Safety (MED SDV-BS)" is required can demonstrate this qualification by completing an approved Small Non-Pleasure Domestic Vessel Basic Safety (MED SDV-BS).

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency, as associated with that competence.

Competence	Knowledge, skill and understanding
Response to marine emergencies on a small vessel in sheltered waters or any domestic vessel	The candidate must have acquired the following knowledge, understanding and proficiency: – Basic understanding of the hazards related to the marine environment and to their own vessel, and of how to prevent shipboard incidents including fire; – Knowledge of the need to raise and react to alarms and deal with emergencies; – Assistance to be provided in fire and abandonment situations; – Knowledge and skills to help own survival and rescue.

3.52 STCW Basic Safety

The applicant for a certificate of competency for which the qualification "General Seamanship" is required can demonstrate that they meet that requirement by one of the following methods:

1) Successful completion of an approved STCW Basic Safety training course, or
2) Successful completion of a refresher training course in STCW Basic Safety.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in tables A-VI/1-1, A-VI/1-2, A-VI/1-3, and A-VI/1-4 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table of table A-VI/1-1 of the STCW Code:	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-VI/1-1 of the STCW Code.

Survive at sea in the event of ship abandonment	
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table of table A-VI/1-2 of the STCW Code: - Minimize the risk of fire and maintain a state of readiness to respond to emergency situations involving fire - Fight and extinguish fires	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-VI/1-2 of the STCW Code.
The candidate must have obtained the following training necessary to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/1-3 of the STCW Code: Take immediate action upon encountering an accident or other medical emergency	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-VI/1-3 of the STCW Code.
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/1-4 of the STCW Code: - Comply with emergency procedures - Take precautions to prevent pollution of the marine environment - Observe safe working practices - Contribute to effective communications on board ship - Contribute to effective human relationships on board ship - Understand and take necessary actions to control fatigue	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-VI/1-4 of the STCW Code.

3.53 Survival Craft and Rescue Boats Other Than Fast Rescue Boats

The applicant for a certificate of competency for which the qualification "Survival Craft and Rescue Boats Other Than Fast Rescue Boats" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved Survival Craft and Rescue Boats Other Than Fast Rescue Boat training course training course, or
2. Successful completion of a refresher training course in Survival Craft and Rescue Boats Other Than Fast Rescue Boat training.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-VI/2-1 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
- Take charge of a survival craft or rescue boat during and after launch - Operate a survival craft engine - Manage survivors and survival craft after abandoning ship - Use locating devices, including communication and signaling apparatus and pyrotechnics - Apply first aid to survivors	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-VI/2-1 of the STCW Code.

3.54 Advanced Fire Fighting

The applicant for a certificate of competency for which the qualification "Advanced Fire Fighting" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved Advanced Fire Fighting training course training course, or
2. Successful completion of a refresher training course in Advanced Fire Fighting training.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-VI/3 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
- Control fire‑fighting operations aboard ships - Organize and train fire parties - Inspect and service fire‑detection and fire extinguishing systems and equipment - Investigate and compile reports on incidents involving fire	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-VI/3 of the STCW Code.

3.55 Marine Advanced First Aid

The applicant for a certificate of competency for which the qualification "Marine Advanced First Aid" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved Marine Advanced First Aid training course, or
2. Successful completion of a refresher training course in Marine Advanced First Aid training.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-VI/4-1 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Apply immediate first aid in the event of accident or illness on board	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-VI/4-1 of the STCW Code.

3.56 Marine Basic First Aid

The applicant for a certificate of competency for which the qualification "Marine Basic First Aid" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved Marine Basic First Aid training course, or
2. Any equivalent or higher course that the Minister deams acceptable.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-VI/1-3 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
Take immediate action upon encountering an accident or other medical emergency	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-VI/1-3 of the STCW Code.

3.57 Operational and practical small vessel familiarization

Details of this familiarization to be inserted here along with model of attestation that authorized representative must sign.

Chapter 4 — Qualifications for STCW Engineering Officer Certificates of Competency and Small Vessel Machinery Operator

4.1 Auxiliary Machinery and Systems, Level 1

The applicant for a certificate of competency for which the qualification "Auxiliary Machinery and Systems, Level 1" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved EOET III/1 training program, or

2. Successfully completion of approved Training Record Book, and
    a. Successfully completion of approved training courses in,
        i. Auxiliary Machinery and Systems Level 1,
        i. Basic Engineering Science; and

3. Pass Final Assessment Examinations OCEW level.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Operate main and auxiliary machinery and associated control systems - Operate fuel, lubrication, ballast and other pumping systems and associated control systems - Ensure compliance with pollution prevention requirements	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code as it pertains to vessel auxiliary machinery and systems.

4.2 Auxiliary Machinery and Systems, Level 2

The applicant for a certificate of competency for which the qualification "Auxiliary Machinery and Systems, Level 2" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/2 training program, or
    b. training courses in Auxiliary Machinery and Systems Level 2, and
2. Pass Final Assessment Examinations at the Second Engineer level for a Second Engineer or Second Engineer less than 3 000 kW Propulsion Power certificate, or,
3. Pass Final Assessment Examinations at the Chief Engineer level for a Chief Engineer or Chief Engineer less than 3 000 kW Propulsion Power certificate.

The method chosen to demonstrate that the applicant possess the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
-Manage the operation of propulsion plant	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code as it pertains to vessel propulsion plant machinery and

machinery -Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery -Manage fuel, lubrication and ballast operations -Manage safe and effective maintenance and repair procedures -Detect and identify the cause of machinery malfunctions and correct faults -Ensure safe working practices	systems.
- Maintain safety and security of the vessel, crew and passengers and the operational condition of life‑saving, fire‑fighting and other safety systems	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code as they pertain to the maintainance of lifesaving fire-fighting and other safety systems, the organization of fire and abandon ship drills, and actions to be taken to safeguard all persons on board in an emergency.
-Develop emergency and damage control plans and handle emergency situations	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code as they pertain to methods and aids for fire prevention, detection, extinction and the function and use of life-saving appliances.

4.3 Motor Propulsion Systems, Level 1

The applicant for a certificate of competency for which the qualification "Motor Propulsion Systems, Level 1" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program, or
    b. training courses in
        i. MotorPropulsion Systems, Level 1 and
        ii. Basic Engineering Science, and
2. Complete an approved Training Record Book, and
3. Pass Final Assessment Examinations OCEW level.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Operate main and auxiliary machinery and associated control systems	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code as they pertain to diesel and gas turbine main propulsion engines and auxiliary machinery and associated control systems.

4.4 Motor Propulsion Systems Level 2

The applicant for a certificate of competency for which the qualification "MotorPropulsion Systems, Level 2" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/2 training program, or

b. training course in Motor Propulsion Systems, Level 2 and

2. Pass Final Assessment Examinations at the Second Engineer level for a Second Engineer or Second Engineer less than 3 000 kW Propulsion Power certificate, or,
3. Pass Final Assessment Examinations at the Chief Engineer level for a Chief Engineer or Chief Engineer less than 3 000 kW Propulsion Power certificate.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
-Manage the operation of propulsion plant machinery -Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery -Manage safe and effective maintenance and repair procedures -Detect and identify the cause of machinery malfunctions and correct faults -Ensure safe working practices	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code as they pertain to diesel and gas turbine main propulsion engines and auxiliary machinery and associated control systems.

4.5 Steam Propulsion Systems Level 1

The applicant for a certificate of competency for which the qualification "Steam Propulsion Systems Level 1" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program, or
    b. training course in
        i. Steam Propulsion Systems Level 1, and
        ii. Basic Engineering Science, and
2. Complete an approved Training Record Book, and
3. Pass Final Assessment Examinations OCEW level.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Operate main and auxiliary Machinery and associated control systems	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code as they pertain to steam turbine main propulsion engines, propulsion boilers and auxiliary machinery and associated control systems.

4.6 Steam Propulsion Systems Level 2

The applicant for a certificate of competency for which the qualification "Steam Propulsion Systems Level 2" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/2 training program, or
    b. training course in Steam Propulsion Systems Level 1, and
2. Pass Final Assessment Examination at the Second Engineer level for a Second Engineer or Second Engineer less than 3 000 kW Propulsion Power certificate, or,
3. Pass Final Assessment Examination at the Chief Engineer level for a Chief Engineer or Chief Engineer less than 3 000 kW Propulsion Power certificate.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of tables A-III/2 of the STCW Code: - Manage safe and effective maintenance and repair procedures - Detect and identify the cause of machinery malfunctions and correct faults - Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery -Ensure safe working practices	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code as they pertain to steam tubine main propulsion engines, propulsion boilers and auxiliary machinery and associated control systems.

4.7 Applied Mechanics Level 1

The applicant for a certificate of competency for which the qualification "Applied Mechanics, Level 1" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program, or
    b. training course in Applied Mechanics, Level 1. Pass an examination in applied mechanics, level 1 if the course mentioned in 1 b. does not granted an exemption for examination.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Operate main and auxiliary Machinery and associated control systems	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code as they pertain to the principals of applied mechanics and hydro-mechanics.

4.8 Applied Mechanics, Level 2

The applicant for a certificate of competency for which the qualification "Applied Mechanics, Level 2" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/2 training program, or
    b. training course in Applied Mechanics, Level 2. Pass an examination in applied mechanics, level 2 if the course mentioned in 1 b. does not granted an exemption for examination.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Plan and schedule operations - Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code as they pertain to the principals of applied mechanics and hydro-mechanics.

4.9 Thermodynamics, Level 1

The applicant for a certificate of competency for which the qualification "Thermodynamics Level, 1" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program, or
    b. training course in Thermodynamics, Level 1. Pass an examination in thermodynamics, level 1 if the course mentioned in 1 b. does not granted an exemption for examination.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Operate main and auxiliary Machinery and associated control systems	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code as they pertain to the principals of thermodynamics and heat transfer.

4.10 Thermodynamics, Level 2

The applicant for a certificate of competency for which the qualification "Thermodynamics, Level 2" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/2 training program, or
    b. training course in Thermodynamics, Level 2. Pass an examination in thermodynamics, level 2 if the course mentioned in 1 b. does not granted an exemption for examination.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that

he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and understanding
- Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code as they pertain to the principals of thermodynamics and heat transfer.

4.11 Electrotechnology and Automation, Level 1

The applicant for a certificate of competency for which the qualification "Electrotechnology and Automation, Level 1" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program, or
    b. training course in Electrotechnology and Automation, Level 1, and
2. Complete an approved Training Record Book, and
3. Pass Final Assessment Examinations OCEW level.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Operate electrical, electronic and control systems - Maintenance and repair of electrical and electronic equipment	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code.

4.12 Electrotechnology and Automation, Level 2

The applicant for a certificate of competency for which the qualification "Electrotechnology and Automation, Level 2" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/2 training program, or
    b. training course in Electrotechnology and Automation, Level 2, and
2. Pass Final Assessment Examination at the Second Engineer level for a Second Engineer (STCW) or Second Engineer less than 3 000 kW Propulsion Power certificate, or,
3. Pass Final Assessment Examination at the Chief Engineer level for a Chief Engineer (STCW) or Chief Engineer less than 3 000 kW Propulsion Power certificate.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

4.13 [Engineering department to insert qualification name]

Competence	Knowledge, Understanding and Proficiency
- Manage operation of electrical and electronic control equipment - Manage troubleshooting, restoration of electrical and electronic control equipment to operating condition - Manage safe and effective maintenance and repair procedures - Detect and identify the cause of machinery malfunctions and correct faults -Ensure safe working practices	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code.

4.14 High Voltage Safety Operational

The applicant for a certificate of competency for which the qualification "High Voltage Safety Operational" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program which has high voltage safety operational training integrated into the program, or
    b. training course in High Voltage Safety Operational.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Operate electrical, electronic and control systems - Maintenance and repair of electrical and electronic equipment	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code as they pertain to high voltage safety.

4.15 HighVoltage Safety Management

The applicant for a certificate of competency for which the qualification "High Voltage Safety Management" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/2 training program which has high voltage safety management training integrated into the program, or
    b. training course in High Voltage Safety Management.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Manage operation of electrical and electronic control equipment - Manage troubleshooting, restoration of electrical and electronic control equipment to operating condition - Manage safe and effective maintenance and repair procedures - Detect and identify the cause of machinery malfunctions and correct faults -Ensure safe working practices	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code as they pertain to high voltage safety.

4.16 Naval Architecture, Level 1

The applicant for a certificate of competency for which the qualification "Naval Architecture, Level 1" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program, or
    b. training course in
        i. Naval Architecture, Level 1, Pass an examination in Naval Architecture, level 1 if the course mentioned in 1 b.(i) does not granted an exemption for examination; and
        ii. Basic Engineering Science.
2. Pass an examination in Naval Architecture, level 1 if the course mentioned in 1 b.(i) does not granted an exemption for examination.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Maintain seaworthiness of the ship	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code.

4.17 Naval Architecture, Level 2

The applicant for a certificate of competency for which the qualification "Naval Architecture, Level 2" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/2 training program, or
    b. training course in Naval Architecture, Level 2.; and pass an examination in Naval Architecture, level 2 if the course mentioned in 1 b. does not granted an exemption for examination.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Control trim, stability and stress	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code.
: - Maintain safety and security of the vessel, crew and passengers and the operational condition of life‑saving, fire‑fighting and other safety systems	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code as they pertain to actions to limit damage and salve the ship following fire, explosion, collision or grounding.
-Develop emergency and damage control plans and handle emergency situations	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code as they pertain to ship construction and damage control.

4.18 Maritime Law and Ships Business, Level 1

The applicant for a certificate of competency for which the qualification "Maritime Law and Ships Business, Level 1" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program, or
    b. training course in Maritime Law and Ships Business, Level 1.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Monitor compliance with legislative requirements - Ensure compliance with pollution prevention requirements	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code.
Monitor and control compliance with Canadian legislative requirements	The candidate must have a knowledge, understanding and proficiency in Canadian legislation and regulation concerning occupational health and safety, safety of life at sea, security and protection of the marine environment, regulatory authorities, recognized organizations.

4.19 Maritime Law and Ships Business, Level 2

The applicant for a certificate of competency for which the qualification "Maritime Law and Ships Business, Level 2" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/2 training program, or
    b. training course in Maritime Law and Ships Business, Level 2.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code.
Monitor and control compliance with Canadian legislative requirements	Additionally includes detailed knowledge of Canadian legislation and regulation to ensure the safety of navigation, persons, property and the environment in the marine industry, Port State Control, marine liability and insurance.

4.20 Technical Drawing

The applicant for a certificate of competency for which the qualification "Technical Drawing" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program, or
    b. training course in Technical Drawing.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Maintenance and repair of shipboard machinery and equipment	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code as they pertain to technical drawing.

4.21 Ship Management Practices

The applicant for a certificate of competency for which the qualification "Ship Management Practices" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved Power Plant Simulator Ship Management Practices course, and
2. Pass examination Power Plant Simulator Ship Management Practices

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
Manage the operation of propulsion plant and auxiliary machinery and systems	Start up, shut down, safety precautions, practices and procedures for the operation of diesel propulsion machinery and systems, auxiliary steam plant, electrical power generating plant. Operation of engine and auxiliary control systems. Normal and emergency operations. Operating limits of propulsion plant. Functions and mechanism of automatic control systems and components.

4.22 Ship Watchkeeping Practices

The applicant for a certificate of competency for which the qualification "Ship Watchkeeping Practices" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved Propulsion Plant Simulator Ship Watchkeeping Practices course, and
2. Pass examination Propulsion Plant Simulator Ship Watchkeeping Practices.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
– - Maintain a safe engineering watch - Use internal communication systems - Operate main and auxiliary Machinery and associated control systems	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code.

4.23 Applied Mathematics

The applicant for a certificate of competency for which the qualification "Applied Mathematics" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program, or
    b. training course in Applied Mathematics and Pass an examination in applied mathematics, if the course mentioned in 1 b. does not granted an exemption for examination.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Operate main and auxiliary machinery and associated control systems	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code as they pertain to principals of applied mathematics.

4.24 Leadership and Teamworking Skill

The applicant for a certificate of competency for which the qualification "Leadership and Teamworking Skill" is required can demonstrate that they meet that requirement by successfully *c*ompleting an approved training course in Leadership and Teamworking Skill.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Application of leadership and Teamworking skills	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code.

4.25 Leadership and Managerial Skill

The applicant for a certificate of competency for which the qualification "Leadership and Managerial Skill" is required can demonstrate that they meet that requirement by successfully *c*ompleting an approved training course in Leadership and Managerial Skill.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/2 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Use leadership and managerial skills	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/2 of the STCW Code.

4.26 Practical Skills

The applicant for a certificate of competency for which the qualification "Practical Skills" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved
    a. EOET III/1 training program, or
    b. Successful completion of training courses in
        i. Practical Skills for the Engineering Department Module 1, Repair and Maintenance,
        ii. Practical Skills for the Engineering Department Module 2, Welding, and
        iii. Practical Skills for the Engineering Department Module 3, Machine Shop.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
- Appropriate use of hand tools, machine tools and measuring instruments for fabrication and repair on board - Maintenance and repair of shipboard machinery and equipment	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code.

4.27 English Language Proficiency

The applicant for a certificate of competency for which the qualification "English Language Proficiency" is required can demonstrate that they meet that requirement by one of the following methods:

1. Providing documentary evidence of
    a. successful completion of a secondary or post secondary educational program where English was the language of instruction,
    b. successful completion of English as a second language instruction at an acceptable level at a CEGEP in the Province of Quebec, or
    c. achievement of test scores at an acceptable level of the Canadian Language Benchmark.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/1 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
Use English in written and oral form	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/1 of the STCW Code.

4.28 General Engineering Knowledge of Small Vessels

The applicant for a certificate of competency for which the qualification "General Engineering Knowledge of Small Vessels" is required can demonstrate that they meet that requirement by one of the following methods:

(1) Small Vessel Machinery Operator

(i) For applicants with 1 month of sea service required in 147(1)(iii)(A),

(a) provide a training certificate for the completion of an approved Small Vessel Machinery Operator course,

(b) Pass a written examination on the General Engineering Knowledge of Small Vessels, and

(c) Pass an oral examination on the General Engineering Knowledge of Small Vessels;

(ii) For applicants with 3 months of sea service required in 147(1)(iii)(B),

Pass a written examination on the General Engineering Knowledge of Small Vessels and

(c) Pass an oral examination on the General Engineering Knowledge of Small Vessels;

Competence	Knowledge, Understanding and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities: Operate small vessel propulsion and auxiliary machinery and systems	General arrangement, operating principles, operational procedures, practices and precautions for: internal combustion engines and engine auxiliary equipment and systems; vessel auxiliary machinery and systems: power transmission machinery and systems; electrical power supply, generation and distribution; control systems, steering systems, pumping systems, bilge systems, deck machinery. Vessel construction and maintaining watertight integrity of hull and compartments, elementary stability. Properties of fuels and lubricants. Watchkeeping procedures, record keeping, safe working practices and hazard recognition.

4.29 Electro-technical Officer

The applicant for a certificate of competency "Electro-technical Officer can demonstrate that they meet the required competence, knowledge, understanding and proficiency of STCW Code Table A-III/6 by one of the following methods:

1. Successful completion of an approved Electro-technical Officer training program, or
2. Succesful completion of an approved Electro-technical Officer transitional training program.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/6 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of tables A-III/6 of the STCW Code	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/6 of the STCW Code.

Chapter 5 - STCW Ratings Certificates of Competency

5.1 Able Seafarer Deck

The applicant for a certificate of competency for which the qualification "Able Seafarer Deck (AB-D)" is required can demonstrate that they meet that requirement by one of the following methods:

1. Successful completion of an approved training course in Able Seafarer Deck, or
2. Obtain a 70 percent grade or more on the TC examination on Able Seafarer Deck (AB-D).

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/5 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table A-II/5 of the STCW Code.	The candidate must have acquired the knowledge, understanding and proficiency listed in Column 2 of table **A-II/5** of the STCW Code.

5.2 Bridge Watch Rating

The applicant for a certificate of competency for which the qualification "Bridge Watch Rating (BWR)" is required can demonstrate that they meet that requirement by:

1. Successful completion of an approved Bridge Watch Rating training course, or
2. Obtaining a 70 percent grade or more on the TC examination on Bridge Watch Rating (BWR), and
    a. Successful completion of an approved training course in steering, or
    b. Providing a steering testimonial.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-II/4 of the STCW Code, as associated with that competence.

Competence	Knowledge, skill and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table A-II/4 of the STCW Code.	The candidate must have acquired the knowledge, understanding and proficiency listed in Column 2 of table **A-II/4** of the STCW Code.

5.3 Able Seafarer Engine

The applicant for a certificate of competency "Able Seafarer Engine" can demonstrate that they meet the required competence, knowledge, understanding and proficiency of STCW Code table A-III/5 by :

(a) in the case of an applicant who has completed an approved Able Seafarer training program,
    (i) providing testimonial(s) of sea service for the sea service required at MPR 156(e)(i),
    (ii) providing a training certificate for completion of an approved Able Seafarer Engine training program, and
    (iii) Pass a written examination on general engineering knowledge.

(b) in the case of an applicant who has not completed an approved Able Seafarer training program,

(i) providing testimonial(s) of sea service for the sea service required at MPR 156(e)(ii),
(ii) provide an acceptable approved training record book,
(iii) providing training certificatesapproved training courses
i. Practical Skills for the Engineering Department Module 1, Repair and Maintenance,
ii. Practical Skills for the Engineering Department Module 2, Welding, and
iii. Practical Skills for the Engineering Department Module 3, Machine Shop,and
(iv) Pass a written examination on general engineering knowledge.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/5 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table A-III/5 of the STCW Code	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/5 of the STCW Code.

5.4 Engine-room Rating

The applicant for a certificate of competency "Engine-room Rating" can demonstrate that they meet the required competence, knowledge, understanding and proficiency of STCW Code Table A-III/4 by:

a. in the case of an applicant who has completed an approved Engine-room Rating training course,
(i) providing testimonial(s) of sea service for the sea service required at MPR 157(e)(i),
(ii) providing a training certificate for completion of an approved Engine-room Rating training program, and
(iii) Pass a written examination on general engineering knowledge.
b. in the case of an applicant who has not completed an approved Engine-room Rating training course,
(i) providing testimonial(s) of sea service for the sea service required at MPR 157(e)(ii),
(ii) provide an acceptable approved training record book, and
(iii) Pass a written examination on general engineering knowledge.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/4 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table A-III/4 of the STCW Code.	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/4 of the STCW Code.

5.5 Electro-technical rating

The applicant for a certificate of competency "Electro-technical rating" can demonstrate that they meet the required competence, knowledge, understanding and proficiency of STCW Code Table A-III/7 by:

1. Successful completion of an approved Electro-technical Rating training program.

The method chosen to demonstrate that the applicant possesses the desired qualification must adequately assess whether that applicant is competent to undertake the tasks, duties and responsibilities of the following table and that he or she has acquired the knowledge, understanding and proficiency described in table A-III/7 of the STCW Code, as associated with that competence.

Competence	Knowledge, Understanding and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table A-III/7 of the STCW Code.	The candidate must have acquired the knowledge, understanding and proficiency listed in column 2 of table A-III/7 of the STCW Code.

5.6 Ship's Cook (Code) – under the Maritime Labour Convention, 2006

Applicants shall demonstrate the required knowledge, understanding and proficiencies by:qualification by:
Providing a training certificate for an approved Ship's Cook course, or
Providing documentary evidence for completion of an acceptable training in culinary practices.

Competence	Knowledge, Understanding and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities: Galley operations including safe and hygenic preparation and storage of food, menu planning and logistics.	The candidate must have acquired the knowledge, understanding and proficiencies required under the Maritime Labour Convention Regulation 3.2 Practical cookery, Galley administration, management and supervision Prevention of food bourne disease Food hygiene Personal hygiene Nutrition and balanced menus Religious and cultural aspects Basic language, calculation and communication skills Workplace safety and health First aid in the galley Fire fighting in the galley Waste control and handling

Applicants shall demonstrate this qualification by:

1. Providing a training certificate for an approved Ship's Cook course, or
2. Providing documentary evidence for completion of an acceptable training in culinary practices.

Chapter 6 - Certificates of Proficiency

6.1 Basic Training for Service on Vessels Operating in Polar Waters

Table of competencies and related knowledge, skill and understanding that a person must possess for a Basic Training for Service on Vessels Operating in Polar Waters certificate of proficiency.

Competence	Knowledge, Understanding and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table A-V/4-1 of the STCW Code.	The candidate must have acquired the knowledge, understanding and proficiency listed in Column 2 of table A-V/4-1 of the STCW Code.

Applicants shall demonstrate this competence by completing an approved Basic Training for Service on Vessels Operating in Polar Waters course; or

Transitional Provision

Until July 1, 2020, seafarers who commenced approved seagoing service in polar waters (or in waters with *acceptable ice conditions) prior to July 1, 2018, shall be able to establish that they meet the requirements by having performed navigational watch duties at the operational or management level, or as a pilot, ice navigator or ice adviser for a period of at least three (3) months in total during the preceding five (5) years of which at least one (1) month within polar waters and at the most two (2) months within waters with acceptable ice conditions. *Acceptable ice conditions means ice conditions that require maneuvering to avoid ice concentrations that could endanger the ship or hinder its progress.

6.2 Advanced Training for Service on Vessels Operating in Polar Waters

Table of competencies and related knowledge, skill and understanding that a person must possess for an Advanced Training for Service on Vessels Operating in Polar Waters certificate of proficiency.

Competence	Knowledge, Understanding and Proficiency
The candidate must be competent to undertake the tasks, duties and responsibilities listed in column 1 of table A-V/4-2 of the STCW Code.	The candidate must have acquired the knowledge, understanding and proficiency listed in Column 2 of table A-V/4-2 of the STCW Code.

Applicants shall demonstrate this competence by completing an approved Advanced Training for Service on Vessels Operating in Polar Waters course; or

Transitional Provision

Until July 1, 2020, seafarers who commenced approved seagoing service in polar waters (or in waters with *acceptable ice conditions) prior to July 1 2018, shall be able to establish that they meet the requirements by having performed navigational watch duties at the management level, or as a pilot, ice navigator or ice adviser for a period of at least three (3) months in total during the preceding five (5) years of which at least one (1) month within polar waters and at the most two (2) months within waters with acceptable ice conditions.
*Acceptable ice conditions means ice conditions that require maneuvering to avoid ice concentrations that could endanger the ship or hinder its progress.

6.3 Type Rating Certificates of Proficiency:

High-Speed Craft Type Rating
Air Cushion Vehicle Type Rating — Deck
Air Cushion Vessel Engineer, Type Rating Class I
Air Cushion Vessel Engineer, Type Rating Class II

Table of competencies and related knowledge, skill and understanding that a person must possess for an above mentioned type rating certificate of proficiency.

Competence	**Knowledge, Understanding and Proficiency**
The candidate must be competent to undertake the tasks, duties and responsibilities related to its operational role.	The candidate must have acquired the knowledge, understanding and proficiency listed in section 18.3.3 of the *HSC Code*: .1 knowledge of all on-board propulsion and control systems, including communication and navigational equipment, steering, electrical, hydraulic and pneumatic systems and bilge and fire pumping; .2 the failure mode of the control, steering and propulsion systems and proper response to such failures; .3 handling characteristics of the craft and the limiting operational conditions; .4 bridge communication and navigation procedures; .5 intact and damage stability and survivability of the craft in damage condition; .6 location and use of the craft's life-saving appliances, including survival craft equipment; .7 location and use of escapes in the craft and the evacuation of passengers; .8 location and use of fire protection and fire-extinguishing appliances and systems in the event of fire on board; .9 location and use of damage control appliances and systems, including operation of watertight doors and bilge pumps; .10 cargo and vehicle stowage and securing systems; .11 methods for control of and communication with passengers in an emergency; and .12 location and use of all other items listed in the training manual.

Applicants shall demonstrate this qualification by :

1. Holding a certificate evidencing a training on items indicated in the competence table has been received;
2. In the case of an Air Cushion Vessel Engineer Type Rating Class I holds the training certificate required in MPR section 173(c);
3. In the case of an Air Cushion Vessel Engineer Type Rating Class II holds the training certificate required in MPR section 174(c); and
4. Obtaining a 70 percent grade or more on the TC practical examination on High-Speed Craft Type Rating.

Chapter 7 - Qualifications Mobile Offshore Unit Certificates of Competency

	Offshore Installation Manger MOU or Barge Supervisor MOU	Offshore Installation Manger MOU FPSO/FSO or Barge Supervisor MOU FPSO/FSO	Ballast Control Operator	Maintenance Supervisor	Maintenance Supervisor non-self-propelled Units
Basic Offshore Survival	X	X	X	X	X
Hydrogen Sulfide Safety	X	X	X	X	X
Command and Control of Major Emergencies	X	X			
Stability - Introduction	X	X	X		
Stability – Surface and Column Stabilized, Stability Self-elevating	X	X	X		
Well Control	X	X			
Meteorology for MOU	X	X			
General Seamanship of MOU	X	X			

Table – Manner of Demonstration

Item	Qualification	Knowledge, Understanding and Proficiency	Manner of Demonstration
1	Basic Offshore Survival	IMO Resolution A.1079(28) Tables 5.5.1 to 5.5.5 IMO Resolution A.1050(27)	Hold a recognized certificate in Basic Offshore Survival Hold a recognized certificate in enclosed space safety
2	Hydrogen Sulfide Safety	Hazards of Hydrogen Sulfide, detection, monitoring, and emergency response	Hold a recognized certificate in Hydrogen Sulfide Safety
3	Command and Control of Major Emergencies	IMO Resolution A.1079(28) Table 6.2	Hold a recognized certificate in Command and Control of Major Emergencies
4	Stability - Introduction	IMO Resolution A.1079(28) Tables 6.2, 6.3 and 6.4	Hold a recognized certificate in Basic Stability of Ships and Mobile Offshore Units or hold an STCW II/1 or II/2 certificate of competency
5	Stability – Surface and Column Stabilized	IMO Resolution A.1079(28) Tables 6.2, 6.3 and 6.4	Hold recognized certificate in 1. Stability of Surface and Column-Stabilized MOU.
	Stability – Self-elevating	IMO Resolution A.1079(28) Tables 6.2, 6.3 and 6.4	Hold recognized certificate in Stability of Self-elevating MOU.
6	Well Control	IMO Resolution A.1079(28) Tables 6.2 and 6.3	Hold a recognized certificate in 1. Supervisor Well Control or 2. Well Control - Production Units
7	Meteorology for MOU	IMO Resolution A.1079(28) Table 6.2	Hold an STCW III/2 certificate of competency, or Hold a recognized certificate in Meteorology for MOU

8	General Seamanship of MOU	IMO Resolution A.1079(28) Tables 6.2 and 6.3	Hold a recognized certificate in the general seamanship of MOU, and Pass an oral examination in the general seamanship of MOU

For the purposes of subsections 194(1)(a), 195(1)(a), 196(1)(b), 197(1)(b), 198(1)(a), 199(1)(b), and 200(1)(a) of the *Marine Personnel Regulations, 2019*, the applicant must provide a letter or letters from the Authorized Representative of the MOU signed by the Offshore Installation Manager, or other responsible person having knowledge of the facts, providing the following information:

- Name and address of Applicant
- Name and address of the applicant's employer
- Name and address of the Authorized Representative or operator of the MOU
- Name of Unit/Vessel
- Type of Unit/Vessel
- Distinctive number or letters
- IMO Number
- Port of Registry
- Gross Tonnage
- Main Propulsion Power (kW)
- Electrical Generation Power (kW) and Voltage (V)
- Dynamically Positioned or not Dynamically Positioned
- Dates of periods when the applicant was on board and performing duties relevant to the certificate sought
- Number of calendar days on board for each period
- Position occupied during each period
- Dates when required tasks were performed and number of tasks performed
- Cargo Operations
- Helicopter landings and departures
- Emergency disconnection exercises

Chapter 8 - Table of Certificate Exchange

Engineering Certificates

Former certificates	Requirements for exchanges	Certificate required under former MPR	Corresponding certificate	Limitation
1st Class Motor	None	N/A	Chief Engineer	Motor vessel limited to 1000 V
1st Class Steam	None	N/A	Chief Engineer	Steam vessel limited to 1000 V
2nd Class Motor	None	N/A	Second engineer	Motor vessel limited to 1000 V
2nd Class Steam	None	N/A	Second Engineer	Steam Vessel limited to 1000 V
3rd Class Motor(III/3)	None	N/A	EOOW & 2nd Eng < 3000 kW	Motor Vessel limited to 1000 V
3rd Class Steam (III/3)	None	N/A	EOOW & 2nd Eng < 3000 kW	Steam Vessel limited to 1000 V
3rd Class Motor (III/1)	Note 1	N/A	EOOW & 2nd Eng < 3000 kW	Motor vessel limited to 1000 V
3rd Class Steam (III/1)	Note 1	N/A	EOOW & 2nd Eng < 3000 kW	Steam vessel limited to 1000 V
3rd Class Motor (III/1)	None	N/A	EOOW	Motor vessel limited to 1000 V
3rd Class Steam (III/1)	None	N/A	EOOW	Steam vessel limited to 1000 V
4th Class Motor (III/1)	None	N/A	EOOW	Motor vessel limited to 1000 V
4th Class Steam (III/1)	None	N/A	EOOW	Steam vessel limited to 1000 V
4th Class Motor dom.	Note 2	N/A	EOOW	Motor vessel limited to 1000 V
4th Class Steam dom.	Note 2	N/A	EOOW	Steam vessel limited to 1000 V
4th Class Motor dom.	None	N/A	EOOW domestic	Motor vessel limited to 1000 V
4th Class Steam dom.	None	N/A	EOOW domestic	Steam vessel limited to 1000 V
Chief Eng. Endorsement <2000 kW motor	None	3rd class Motor (III/3)	EOOW & Chief engineer <3000 kW	Motor vessel limited to 1000 V
Chief Eng. Endorsement <2000 kW Steam	None	3rd class Steam (III/3)	EOOW & Chief engineer <3000 kW	Steam vessel limited to 1000 V
Second Eng. Endorsement <2000 kW motor	None	4th Class Motor (III/1)	EOOW & 2nd Eng < 3000 kW	Motor vessel limited to 1000 V
Second Eng. Endorsement <2000 kW steam	None	4th Class Steam (III/1)	EOOW & 2nd Eng < 3000 kW	Steam vessel limited to 1000 V

Note 1: Must meet the requirements of section 146 of the *Marine Personnel Regulations SOR/2007-115* and the Ship Safety Bulletin 09/2017.

Note 2: Must meet the requirements of section 147 of the Marine Personnel Regulations SOR/2007-115 and the Ship Safety Bulletin 09/2017.