



Certificate of Competency for Master and Officer of the Watch Tug less than 500 GT and 3000 GT near coastal and Certificate of Proficiency for Tug Rating

Notice to all Masters, Officers and Seafarers in the Merchant Navy and to those involved in Maritime Training

This notice replaces MGN 209(M).

Summary

This notice describes the system for deck officers and ratings to gain certification for Tugs working in near coastal areas and categorised waters.

Key Points

The certification system uses both Maritime Studies Qualifications and STCW courses to allow deck officers and ratings to achieve Tug restricted qualifications for Master, Officer of the Watch (OOW) and Rating.

This notice covers:

- | | |
|---|--------------------------------|
| 1) Introduction | 7) Ancillary Training Courses |
| 2) Certificate Structure | 8) Application Procedure |
| 3) Medical Fitness and Eyesight Standards | 9) Notice of Eligibility (NOE) |
| 4) Service Definitions | 10) Education and Training |
| 5) Proof of Service and Testimonials | 11) Revalidation |
| 6) Oral Examination | |

1.0 Introduction

- 1.1 STCW 78 as amended allows an Administration to adopt alternative arrangements of education and training for special types of ships and trades. The VQ system of education and training ended in April 2013.
- 1.2 A new system using Maritime Studies Qualifications (MSQ) developed by The Maritime Skills Alliance (MSA) has been introduced and will cover most of the academic work needed for certification.



1.3 This guidance note details the career route from rating to Master Tug less than 3000 GT in the near coastal area.

2.0 Certificate structure

2.1 Tug Able Seafarer has the following STCW functions:

- navigation at the support level, and
- controlling the operation of the ship and care for persons on board at the support level.

2.2 OOW Tug less than 500 GT and 3000 GT near coastal Certificates of Competency (CoC) have the following STCW functions:

- navigation at the operational level,
- controlling the operation of the ship and care for persons on board at the operational level, and
- radio communications

2.3 Master Tug near coastal CoCs have the following STCW functions:

- navigation at the management level,
- controlling the operation of the ship and care for persons on board at the operational level, and
- radio communications.

3.0 Medical fitness and eyesight standards

3.1 For any CoC you must meet the medical fitness and eyesight standards as required by the Merchant Shipping (Medical Examination) Regulations 2010¹. Details on the application of those regulations is found in MSN 1822 (M)². Countries whose seafarer medical certificates are accepted as equivalent to the UK seafarers Medical Certificate (ENG 1) can be found in MSN 1815³.

3.2 The seafarer medical examination includes a sight test for both colour vision and visual acuity. Failure to meet the statutory requirements will mean that an unrestricted medical certificate cannot be issued. Anyone considering a seagoing career is strongly advised to have a medical or sight test, which includes testing both colour and visual acuity, before starting training. You can arrange a separate sight test with a local optometrist by taking along an Application for Seafarer Vision Test Form (MSF 4100). The form can be obtained by contacting a MCA Marine Office or the MCA Seafarer Health and Safety Branch on 0044 (0)2380 329247 or seafarers.s&h@mcga.gov.uk

3.3 For any CoC you must produce a valid medical fitness certificate, either

- the UK medical fitness certificate, currently known as an ENG 1, issued by a MCA approved medical practitioner, or
- a certificate issued by the Administration of any country whose medical fitness certificate is recognised as equivalent to the UK ENG 1.

Updated lists are available from the MCA website.

¹ SI 2010/737 or any subsequent amendment

² MSN 1822 (M) or any subsequent amendment

³ MSN 1815 or any subsequent amendment



3.4 The medical fitness certificate must specify the date of examination and the period of validity.

4.0 Service definitions

4.1 For the purposes of this notice service definitions are as follows:

- **Tug Service** is time spent at sea, at anchor on river or canal transits and time in port associated with the work in a Tug.
- **Watchkeeping Service** is time spent as a Watchkeeping Officer in full charge of a navigational watch for not less than four out of every 24 hours. Shorter periods may be aggregated together.

4.2 Service must be in the deck department.

4.3 For the issue of your COC at least six months of your qualifying tug service must have been performed within the five years preceding the application.

4.4 Service may be performed in vessels of any flag.

4.5 Service in a dual engine and deck capacity will be counted at the rate of 50%.

Example: Two days service as a deck or engine rating may only count as one day deck time and one day engine room time.

4.6 Apprentices who are undertaking training who are sailing as supernumeraries will be granted reduced time (see 10.4 and 10.5).

5.0 Proof of service and testimonials

5.1 Before being considered for oral examination, you are expected to prove the full amount of qualifying sea service for a CoC. All service required must be completed and verified to the satisfaction of the MCA.

5.2 Evidence of tug service should be in the form of any of the following documents and be supported by testimonials:

- Merchant Navy discharge book
- Certificates of discharge (Annex C)
- Similar MCA approved service record book

5.3 Your testimonials should preferably be in the format of Annex D. If details of sea service and watchkeeping service are not included in the testimonials then it must be verified by separate certificates of service. Testimonials or certificates of service should be signed by the Master of the vessel in which the qualifying service has been performed. If you are serving as Master your testimonials or certificates of service must be signed by the owner or a responsible person from the management company such as a Company Director or Superintendent.

6.0 Oral examination

6.1 The outline syllabi for the MCA oral examinations are annexed to this notice and are available from the MCA website.



6.2 Higher level training relies on the underpinning knowledge of the lower level training. Be aware that questions in the oral examination may, in addition to the published oral syllabus, include topics that should have been covered in previous training. It is generally expected that all training modules and ancillary training courses will be completed before attempting the oral examination, as these provide the knowledge on which the examination is based.

6.3 Your oral examination pass is valid for three years. The oral examination pass must be in date at the time of issue of your CoC. Further information on oral examinations is available in MGN 69⁴.

7.0 Ancillary Training Courses

7.1 All STCW ancillary training courses must be approved by the MCA.

7.2 Training providers who have MCA approval to deliver ancillary training courses will hold a current Course Approval Certificate for that course. STCW ancillary training courses completed under the authority of specified MCA recognised Administrations are also acceptable.

7.3 If you are the Master or otherwise in charge of medical care on a UK registered vessel you will be required to undertake refresher training in Proficiency in Medical Care (STCW A-VI/4-2) every five years⁵. Proficiency in Medical Care certificates must be in date when presented for issue of your CoC.

Note: Not required for revalidation of your CoC.

8.0 Application procedure

8.1 Completed application forms (MSF 4260) should be sent to the address on the form with the appropriate fee plus passport photos and documents as required. A summary of the application procedure at each level is described in section 10.

8.2 Applications for oral examinations will not be assessed without the following:

- Fee
- Valid medical fitness certificate

And where required:

- Passport
- Two passport size photos
- Proof of service
- Testimonials
- Four elements of basic training
- Security Awareness (STCW A-VI/6-4)

8.3 Fees are as stated in the latest Fees Amendment Regulations⁶.

8.4 With the exception of passports, as described below, the supporting documents must be original. If you fail to submit all the required documents your application may be returned without being processed. A minimum of 28 days should be allowed for processing.

⁴ MGN 69 (M) Conduct of MCA Oral Examinations or any subsequent amendment

⁵ As detailed in MGN 96 (M) Emergency, Occupational Safety, Medical Care and Survival Functions or any subsequent amendment

⁶SI 1996/3243 The Merchant Shipping (Fees) Regulations 1996 as amended



- 8.5 A photocopy of your passport is acceptable provided that it is certified as a “true copy” by either;
- the Master of the vessel,
 - the same person who verifies the photographs and counter signs the application, or
 - a member of MCA staff.

In all cases the person should write ‘I have seen the original passport and confirm that this is a true copy’ and include their full name, signature and the date. Masters should also give their CoC number and issuing Administration.

- 8.6 Please be reminded that under Section 47(5) of the Merchant Shipping Act 1995 any person who makes a statement which they know to be false for the purpose of obtaining for themselves or for another person a certificate or other document shall be liable on summary conviction to a fine.

9.0 Notice of Eligibility (NOE)

- 9.1 Once you are issued with an NOE you will be eligible to attend the MCA oral examination. When you are ready to sit the examination you should contact your local MCA Marine Office for an appointment. Contact details for MCA Marine Offices are available from the MCA website.

- 9.2 NOEs are valid for five years from the date of issue which is clearly stamped on the NOE. If this period lapses you will be required to make a new application and all sea service will be reassessed. Full supporting documentation and the appropriate fee must be supplied with the new application. This is to ensure that the assessed sea service remains valid during the qualifying period leading to the issue of a CoC.

- 9.3 If you fail an oral exam you need to apply for a new NOE before re-sitting the examination. After your third or subsequent unsuccessful attempts you must wait three months before re-sitting the exam. To apply for a re-sit, your NOE showing the fail result, should be returned to the MCA Seafarer Training and Certification Branch with the appropriate re-sit fee. A new NOE will then be issued.

- 9.4 If you pass the oral examination you should return your NOE along with any other outstanding documents to the MCA Seafarer Training and Certification Branch. A minimum of 14 days should be allowed for issue of the new CoC. If an existing CoC is being upgraded then the original CoC must be returned with the NOE.

- 9.5 Please be aware once you have completed your oral exam the result will only be valid for three years. If this period of time elapses you will be required to make a new application and all sea service will be reassessed.

10.0 Education and Training

- 10.1 Many of the STCW Courses listed below have MSQ equivalents which are detailed in Annex B. You may combine MSQ units and STCW courses where appropriate to meet the requirements.

10.2 Tug Watch Rating (Navigation Watch Rating Certificate) (STCW A-II/4)

To qualify for the issue of this certificate you must meet the following requirements:



- a) Complete the following Tug Service:
 - i. 6 months, or
 - ii. if you have completed special training you need to complete only 2 months sea service (see annex B)
- b) Complete the Watch Rating section of your MCA approved Training Record Book level 2⁷.
- c) Hold the following certificates:
 - i. Four elements of STCW basic training:
 - Personal Survival Techniques (STCW A-VI/1-1),
 - Fire Prevention and Fire Fighting (STCW A-VI/1-2),
 - Elementary First Aid (STCW A-VI/1-3),
 - Personal Safety and Social Responsibilities (STCW A-VI/1-4), and
 - ii. Security Awareness Course (STCW A-VI/6-4), **or**
 - iii. Pass the required MSQ units detailed in Annex B within the last five years.

10.3 Tug Able Seafarer Rating (STCW A-II/5)

To qualify for the issue of this certificate you must meet the following requirements:

- a) Hold a Navigation Watch Rating Certificate
- b) Whilst holding a Navigational Watch Rating Certificate complete 12 months tug service
- c) Hold the following certificates:
 - i Proficiency in Survival Craft and Rescue Boats (PSC&RB)(STCW A-VI/2-1)
 - ii Efficient Deck Hand (EDH)
- d) Pass the required MSQ units detailed in Annex B within the last five years.

10.4 OOW (Tug) less than 500 GT near coastal area;

To qualify for the issue of this certificate you must meet the following requirements:

- a) Complete the following Tug Service:
 - i 12 months as an deck apprentice with not less than 8 months on tugs or 36 months as a tug rating, including

⁷ Please contact the British Tug Association to obtain the appropriate Training Record Book.



- ii. at least 90 days outside categorised waters, each day to count only if not less than 4 hours is outside categorised waters.
 - iii. If 'ii' is not met then your certificate will be limited to not more than 30 miles from a safe haven around the coast of the United Kingdom until relevant sea time is achieved.
- b) Have completed the MCA approved Training Record Book Level 3⁷
- c) Hold the following certificates:
- i. Four elements of STCW basic training:
 - Personal Survival Techniques (STCW A-VI/1-1),
 - Fire Prevention and Fire Fighting (STCW A-VI/1-2)
 - Elementary First Aid (STCW A-VI/1-3)
 - Personal Safety and Social Responsibilities (STCW A-VI/1-4)
 - ii. Security Awareness (STCW A-VI/6-4)
 - iii. GMDSS Restricted Operators Certificate (ROC)
 - iv. Proficiency in Survival Craft and Rescue Boats (PSC&RB)(STCW A-VI/2-1)
 - v. Efficient Deck Hand (EDH)
 - vi. Advanced Fire Fighting (STCW A-VI/3)
 - vii. Medical First Aid (STCW A-VI/4-1)
 - viii. Navigation Aids and Equipment and Simulator Training (NAEST) (Operational)
 - ix. Signals within the last 3 years
 - x. Human Element, Leadership and Management (HELM) Course (Operational)
- d) Pass the required MSQ units detailed in Annex B within the last five years
- e) Pass oral E (T) – OOW (Tug) near coastal within the last three years.

10.5 OOW (Tug) less than 3000 GT near coastal area:

To qualify for the issue of this Certificate you must meet all of the requirements for the issue of OOW Tug < 500 GT (see paragraph 10.4 a, b, c, d and e above) **and** pass the following SQA exam within the last three years:

- 035-21 Chartwork and practical navigation



10.6 **Master (Tug) less than 500 GT near coastal area:**

To qualify for the issue of this Certificate you must meet all of the following requirements:

- a) Complete the following Tug Service:
 - i. 12 months serving as an officer on Tugs, including
 - ii. not less than 90 days outside categorised waters, each day to include not less than 4 hours bridge watch keeping duties outside categorised waters.
 - iii. If 'ii' is not met then your certificate will be limited to not more than 30 miles from a safe haven around the coast of the United Kingdom until relevant sea time is achieved.
- b) Have completed the MCA approved Training Record Book Level 4⁷
- c) Hold all of the following certificates:
 - i. GMDSS Restricted Operators Certificate (ROC),
 - ii. Medical Care (STCW A-VI/4-2)
- d) Pass the required MSQ units detailed in Annex B within the last five years
- e) Hold an OOW (Tug) less than 500 GT CoC
- f) Pass oral N (T) – Master (Tug) less than 500 GT near coastal within the last three years.

10.7 **Master (Tug) less than 3000 GT near coastal area:**

To qualify for issue of this Certificate you must meet all of the following requirements:

- a) Complete the following Tug Service:
 - i. 24 months serving as an officer on Tugs, including
 - ii. not less than 90 days outside categorised waters, each day to include not less than 4 hours bridge watch keeping duties outside categorised waters.
 - iii. If 'ii' is not met then your certificate will be limited to not more than 30 miles from a safe haven around the coast of the United Kingdom until relevant sea time is achieved.
- b) Have completed the MCA approved Training Record Book Level 4⁷
- c) Hold all of the following certificates:
 - i. GMDSS Restricted Operators Certificate (ROC),



- ii. Certificate of Proficiency in Medical Care (STCW A-VI4-2)
 - iii. Navigation Aids and Equipment and Simulator Training (NAEST) (Management)
- d) Pass the required MSQ units detailed in Annex B within the last five years
 - e) Hold a minimum of an OOW (Tug) less than 3000 GT CoC and have passed all written examinations and short courses required for the issue of that certificate.
 - f) Pass oral P (T) - Master (Tug) less than 3000 GT near coastal within the last three years.

11.0 Revalidation

11.1 If you hold a CoC restricted to Tugs you are required to revalidate your certificate at intervals not exceeding five years for it to remain valid for service. When revalidating you must meet the following requirements:

- a) Produce a valid medical fitness certificate (Paragraph 3 refers)
- b) Have served in an appropriate Officer capacity on the crew agreement in a vessel of 15 metres or over in load-line length for at least 12 months during the preceding five years.
- c) Hold an accepted GMDSS Certificate (minimum ROC)

11.2 If you do not meet the above requirements you may do one of the following:

- a) Serve in a supernumerary capacity for three months before applying for revalidation of the certificate. During this period you will be expected to update your professional knowledge. If you have three months service as a Deck Officer in a vessel of 15 metres or over in load-line length immediately prior to your CoC expiry date you may within three months after the expiry date apply for revalidation.
- b) You may apply to Seafarer Training and Certification branch for a Notice of Eligibility (NOE) for an MCA oral examination at a lower rank. On passing the oral examination you will be issued with a temporary CoC for service the lower rank. After completing 3 months sea service your CoC will be revalidated in full. Temporary Certificates will be issued for a period of 6 months; they may be extended at the discretion of the Chief Examiner. Those who wish to restrict their service to a certain type of vessel may elect to be examined only on that type of vessel, in which case the temporary CoC will indicate this limitation.
- c) Have performed duties, in an acceptable occupation, appropriate to the class of certificate you hold for at least two and a half years of the preceding five years.⁸

11.3 Refresher training for Tug restricted CoCs is the completion of NAEST and stability unit detailed above.

⁸ MGN 9 (M) Procedure for the Issue and Revalidation of Certification of Competency, Marine Engine Operator Licences and Tanker Endorsements or any subsequent amendments



- 11.4 Application forms for revalidation (MSF 4201) are available from MCA Marine Offices or from the MCA website. Fully completed forms should be sent, with the current fee and supporting documents to the address on the form.
- 11.5 Please note that failure to revalidate a CoC prior to the certificate expiry date will make the holder ineligible to serve in the capacity specified and could result in delays to vessel operation. You are therefore urged to make applications in good time and allow at least 14 days for processing.

More Information

Seafarer Training and Certification
Maritime and Coastguard Agency
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Spring Place
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MCA Website Address: www.dft.gov.uk/mca

File Ref: MC058/022/0126

Published: June 2013
Please note that all addresses and telephone numbers are correct at time of publishing



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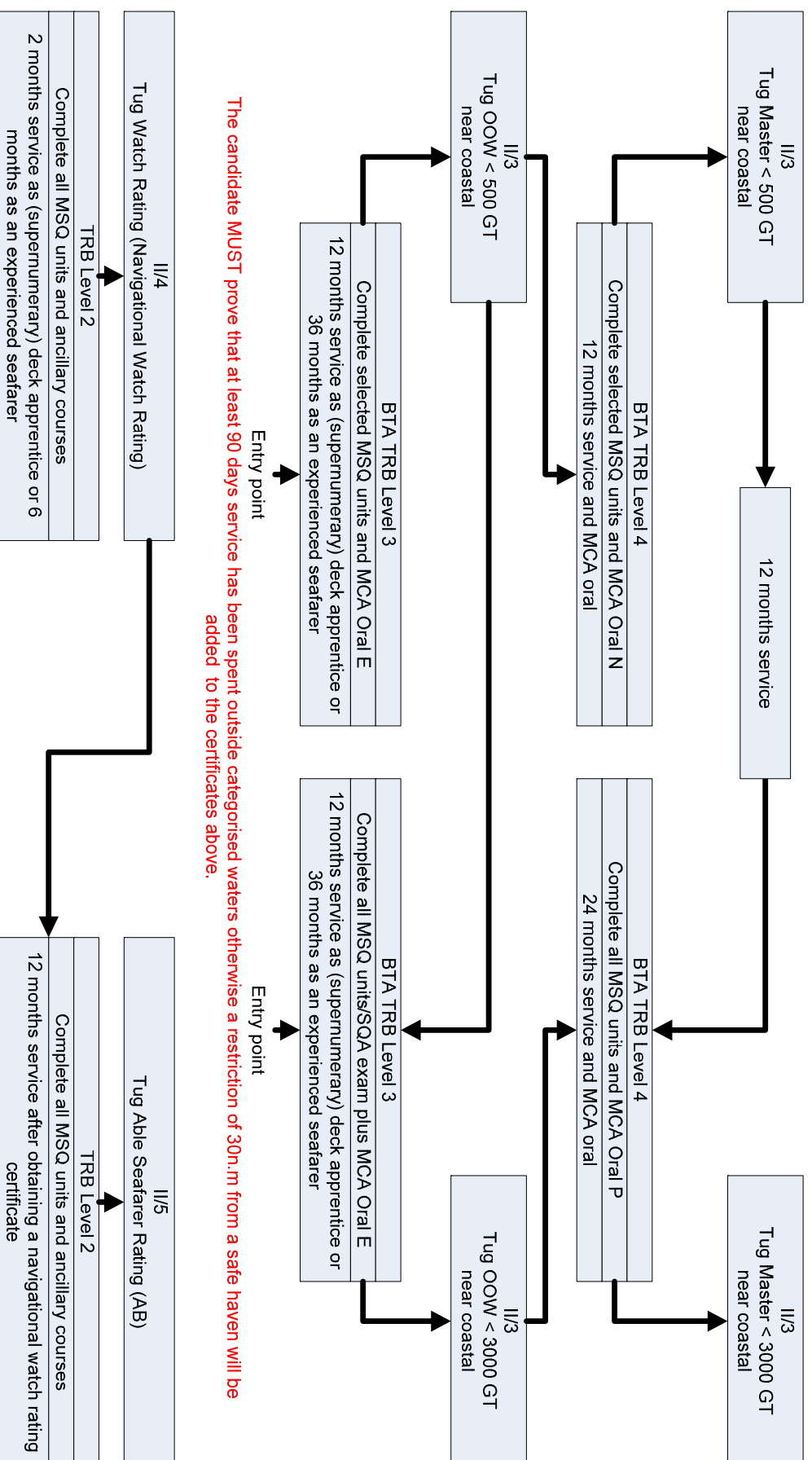
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Tug Deck Officer and Rating Certificate Structure

Annex A



The candidate **MUST** prove that at least 90 days service has been spent outside categorised waters otherwise a restriction of 30nm from a safe haven will be added to the certificates above.

Whilst Undertaking training at L2 and L3 a reduction in service time requirements will be granted to those serving on board as supernumery whilst following an MCA / BTA approved scheme.



MSQ Units and STCW Equivalents

Many of the STCW Courses have MSQ equivalents, you may combine these where appropriate to meet the requirements

MSQ Units for Watch rating special training

UNIT TITLE	MSQ CODE	STCW/MCA
Maritime employment, environmental and health practice	UNIT 1	PSSR (STCW A-VI/1-4)
Maritime sector overview	UNIT 2	
Vessel construction and stability	UNIT 5	
Assist with vessel's navigational watch	UNIT 10	
Survival in water during emergencies	UNIT 13	PST (STCW A-VI/1-1)
Vessel fire prevention and fire fighting	UNIT 14	FPPF (STCW A-VI/1-2)
Maritime security	UNIT 15	
Emergency first aid in response to maritime emergencies	UNIT 16	EFA (STCW A-VI/1-3)
Basic navigational watchkeeping	UNIT 23	

Additional MSQ Units for Tug rating Able Seafarer Deck Certificate of Proficiency

UNIT TITLE	MSQ CODE	STCW/MCA
Vessel rope-work, anchoring and mooring operations	UNIT 3	STCW A-VI/2-7
Securing a vessel for passage	UNIT 4	STCW A-VI/2-7
Vessel rope-work, anchoring and mooring activities	UNIT 24	STCW A-VI/2-7
Assisting with securing for passage	UNIT 25	STCW A-VI/2-7
Control operation of a survival craft and rescue boat.	UNIT 29	PSC&RB (STCW A-VI/2-1)



MSQ Units for Officer of the watch (Tug) less than 500 GT near coastal certificate

Unit Title	MSQ CODE	
Vessel navigation and tides	UNIT 11	
Ship Construction	UNIT 37	
Chart-work and tides	UNIT 41	
Contribute to stability and watertight integrity	UNIT 43	
Control tug operations	UNIT 44	
Control vessel anchoring mooring and securing operations	UNIT 46	
Interpret Meteorology in the near coastal area	UNIT 48	
Provide Fire Fighting response on board a vessel	UNIT 59	AFF (STCW A-VI/3)
Provide Medical First Aid on board a vessel	UNIT 60	MFA (STCW A-VI/4-1)
Take charge of a watch in the near coastal area.	UNIT 63	NAEST
Respond to navigational emergencies	UNIT 62	NAEST
Control Marine Radar and Automatic Identification systems	UNIT 88	NAEST
Control Marine Electronic Navigation Systems	UNIT 89	NAEST
Control Electronic Chart Display Information Systems (ECDIS)	UNIT 90	ECDIS
Control Bridge Resources	UNIT 91	NAEST

MSQ units for Officer of the watch (Tug) less than 3000 GT near coastal certificate

Note: you must also complete units from OOW < 500 GT near coastal.

UNIT TITLE	MSQ CODE	STCW/MCA
Vessel watch keeping	UNIT 12	



Control vessel operations	UNIT 30	
Mathematics for seafarers	UNIT 34	
Nautical Science - an introduction	UNIT 35	
Control vessel communications	UNIT 45	GMDSS/ROC
Maintain safe and environmentally responsible working practices on board a vessel	UNIT 50	
Navigation Mathematics and Science	UNIT 58	
Respond to emergencies on board a vessel	UNIT 61	

MSQ Units for Master (Tug) less than 500 GT near coastal certificate

UNIT TITLE	MSQ CODE	STCW/MCA
Direct Tug operations	UNIT 47	
Manoeuvre a tug	UNIT 55	

MSQ Units for Master (Tug) less than 3000 GT near coastal certificate

Note: you must also complete units from Master < 500 GT near coastal.

UNIT TITLE	MSQ CODE	STCW/MCA
Manage personnel on board a vessel	UNIT 51	
Manage Vessel navigation	UNIT 52	
Manage vessel maintenance	UNIT 53	
Manage vessel operations	UNIT 54	
Take charge of medical care on board a vessel	UNIT 66	MC (STCW A-VI/4-2)



MARITIME AND COASTGUARD AGENCY (MCA)

TUG CERTIFICATE OF DISCHARGE

Surname (Block Capitals)		Other Names (In Full)	
Passport or Discharge Book Number		Name of Vessel	
Official or IMO Number		Gross Tonnage	
Capacity		Grade and Number of any CoC	
Date and Place of Joining		Date and Place of Leaving	
Description of Voyage		Total Time Onboard	
		Rota if applicable	

Signature of Master

Name (Print)

CoC No

Issuing Administration

Tug/ Company Stamp:

Date of issue/...../.....



Deck Testimonial (Tug)

Company address:
.....
.....

Phone
Fax
Email

Part 1 Service

This is to certify that in capacity of Master/ Chief Mate/ OOW/ Rating*:

Full name
Date of Birth/...../.....
Discharge book or other National I.D.....

Has served onboard the Tug:

Name
Length (m)
Gross Tons (gt)
Official Number

From/...../..... **To**/...../.....

The above service as defined in MGN 495, include Tug service

outside categorised waters of..... days
inside categorised waters of days

The officer was in full charge of a navigational watch for not less than four out of every 24 hours whilst the vessel was engaged on passage giving:

Watchkeeping Service of.....dayst

Rota worked (if applicable)

Leave of absence was granted as follows:



Part 2 Official endorsement

Signed

Name (Print)

Position Master/ Responsible Person*

If Master then CoC No.:.....

 Issuing Administration:.....

If responsible person Organisation:.....

 Position in organisation:.....

Tug/ Company Stamp:

Date/...../.....



**OOW - TUG LESS THAN 500 GT NEAR-COASTAL
STCW Regulation - II/3 SYLLABUS DECK – E (T)**

Candidates should demonstrate the ability to apply the knowledge outlined in this oral examination syllabus by appropriate responses, anticipations and reactions to a range of routine, non-routine and contingency scenarios as presented by the examiner.

TOPIC 1 NAVIGATION**1. Plan and Conduct a Passage Including Position Determination**

- a) passage planning with respect to the use of navigational publications including navigational charts, sailing directions, light lists, tide tables, radio navigational warnings and ships' routeing information;
- b) the requirements of ship routeing and mandatory reporting systems;
- c) maritime buoyage systems - IALA region 'A';
- d) radar - practical use of, modes of operation, sources of error and parallel indexing;
- e) to use an azimuth mirror for taking bearings, including the determination of compass errors;
- f) operational limitations of the navigational equipment commonly fitted on board.

2. Maintain a Safe Navigational Watch

- a) a thorough knowledge of the principles of navigational watchkeeping at sea, including under pilotage, and watchkeeping at anchor and in port;
- b) a thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea;
- c) knowledge of steering control systems, including automatic pilot, operational procedures and change-over from manual to automatic control and vice-versa, adjustment of controls for optimum performance;
- d) radar - practical use of, modes of operation, sources of error, plotting and parallel indexing;
- e) meteorology: ability to use and interpret information obtained from shipborne meteorological instruments, knowledge of the characteristics of the various weather systems, reporting procedures and recording systems, ability to apply the meteorological information available.
- f) the use of all bridge equipment commonly fitted on board the ships concerned.

3. Compasses

- a) use and limitations of compasses commonly fitted on board the ship concerned.

4. Manoeuvre the Ship

- a) preparation for getting under way, duties prior to proceeding to sea, making harbour, entering a dock, berthing alongside quays, jetties, or other ships, and securing to buoys;
- b) helm orders, conning the ship, effects of propellers on the steering of a ship, effects of wind and current, stopping, going astern, turning short round, interaction and squat;
- c) action in event of failure of: - bridge control, telegraph or steering; emergency steering arrangements;
- d) onboard procedures for anchoring.
- e) effect of tow when manoeuvring.

TOPIC 2 SEAMANSHIP**1. Tug Operations**

- a) use and care of synthetic fibre and wire ropes, ascertaining of safe-working loads;
- b) take up and letting go of a tow;



- c) awareness of types of tug;
- d) result of girting and importance of gob/gog lines

TOPIC 3 RESPONSE TO EMERGENCIES

1. Response to Navigational Emergencies

- a) initial action following: man overboard, collision, grounding, flooding or major mechanical damage and receipt of a distress message; initial damage assessment and control, protection of the marine environment;
- b) precautions for the protection and safety of passengers in emergency situations;
- c) use of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual (Volume III), distress and emergency signals;
- d) use of International Code of Signals;
- e) emergency communications within the GMDSS regulations.

2. Response to Other Emergencies

- a) emergency organisational procedures commonly found on board tugs;
- b) immediate action on loss of tow
- c) knowledge of fire prevention;
- d) knowledge of classes and chemistry of fire;
- e) knowledge of fire-fighting systems commonly found on board the ships concerned;
- f) understanding of action to be taken in the event of fire, including fires involving oil;
- g) use and care of life-saving appliances and equipment including portable radios, EPIRBs, SARTs, immersion suits and thermal protective aids, and rocket line throwing apparatus;
- h) correct use of distress signals and awareness of penalties for misuse;
- i) operation of survival craft and rescue boats;
- j) knowledge of survival at sea techniques;
- k) knowledge of contents of LSA training manuals;
- l) ability to organise abandon ship drills;
- m) sources of medical information available.

TOPIC 4 ONBOARD SHIP OPERATIONS

1. Pollution Prevention Requirements

- a) precautions to be taken to prevent pollution of the marine environment as required by the MARPOL Conventions, including Restricted Areas;
- b) basic understanding of the SOPEP manual and Garbage Management Plans.

2. Seaworthiness of the Ship

- a) understand fundamentals of water tight integrity, and the closing of all openings including hatch covers, access hatches and watertight doors;
- b) preparations for heavy-weather;
- c) working knowledge of the use of stability and trim information on board tugs

3. Legislative Requirements

- a) contents and use of Merchant Shipping Notices, Marine Guidance Notes, Marine Information Notes and the Annual Summary of Admiralty Notices to Mariners;
- b) knowledge and application of current Merchant Shipping Health and Safety legislation and the Code of Safe Working Practices for Merchant Seamen;
- c) purpose of the International Safety Management (ISM) Code;
- d) purpose of Flag State and Port State Control.



**MASTER – TUG LESS THAN 500GT NEAR-COASTAL
STCW Regulation - II/3 SYLLABUS DECK – N**

Candidates should demonstrate the ability to apply the knowledge outlined in this oral examination syllabus and oral examination syllabus Deck E, by the appropriate responses, anticipations and reactions to a range of routine, non-routine and contingency scenarios as presented by the examiner.

TOPIC 1 NAVIGATION

1. Plan and Conduct Safe Navigation

- a) demonstrate an ability to undertake voyage planning, taking into consideration:
 - i) restricted waters;
 - ii) meteorological conditions, through the interpretation of a synoptic chart, and to forecast local area weather, the characteristics of various weather systems;
 - iii) restricted visibility;
 - iv) the requirements of ship routeing and mandatory reporting systems; reporting in accordance with ship reporting systems;
 - v) characteristics of the tow
- b) limitations of electronic chart systems including ECDIS and RCDS navigational chart systems;
- c) AIS
- d) port radio information services: knowledge of the types of service available to aid vessels entering ports, berthing, VTIS and VTS services, as indicated in The Admiralty List of Radio Signals - Vessel Traffic Services, Port Operations and Pilot Stations;
- e) maritime buoyage systems - IALA region 'A'.

2. Establish & Maintain Safe Watchkeeping Arrangements and Procedures

- a) a thorough knowledge of the principles of navigational watchkeeping at sea, including under pilotage, and watchkeeping at anchor and in port;
- b) a thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea;
- c) knowledge of principles of establishing a safe engineering watch at sea, anchor and in port.

3. Compasses

- a) compasses commonly fitted on board the ships concerned - variation and deviation, causes and effects, siting of other equipment with reference to magnetic compasses;
- b) knowledge of the purpose of correctors/corrections.

4. Manoeuvre the Tug and Operate Small Ship Power Plants

- a) anchoring and working anchors and cables in all circumstances;
- b) proper procedures for berthing and unberthing;
- c) knowledge of factors affecting safe manoeuvring and handling;
- d) knowledge of the operation of small ship power plants and auxiliaries

TOPIC 2 RESPONSE TO EMERGENCIES

1. Response to Navigational Emergencies

- a) action to be taken when disabled and in distress, abandoning ship, survival procedure, use of rockets and rocket apparatus;
- b) measures to be taken following collision, grounding, heavy weather damage and leaks including the possibility of beaching a ship;
- c) towing and being towed;



- d) knowledge of emergency steering systems;
- e) knowledge of search and rescue procedures, assisting a ship or aircraft in distress, rescuing the passengers and crew of a disabled ship or ditched aircraft;
- f) use of the International Aeronautical and Marine Search and Rescue (IAMSAR) Manual (Volume III), distress and emergency signals;
- h) emergency communications within the GMDSS regulations.

2. Response to Other Emergencies

- a) methods of dealing with fire onboard ship; prevention of fire at sea and in port;
- b) use and maintenance of fire-fighting equipment, fire dampers, doors and screens, and detection equipment;
- c) the organisation and direction of fire-fighting drill training;
- d) launch and manage survival craft, recover rescue boats at sea;
- e) the organisation and direction of life-boat and life-raft drill training;
- f) understand the fundamental actions to be taken in the event of partial loss of intact buoyancy;
- g) rescue from enclosed and dangerous spaces;
- h) appreciation of action to be taken when emergencies arise in port;
- l) sources of medical information available.

TOPIC 3 ON BOARD SHIP OPERATIONS

1. Pollution Prevention Requirements

- a) precautions to be taken to prevent pollution of the marine environment as required by the MARPOL Conventions, including Restricted Areas;
- b) take appropriate action in response to pollution incidents onboard and found at sea;
- c) knowledge of the contents of the SOPEP manual, Garbage Management Plans, and antipollution equipment;
- d) master's duties, obligations and liabilities, including the keeping of records.

2. Seaworthiness of the Tug and Tow

- a) precautions to be taken before the onset of heavy weather, management of small ships in heavy weather, handling a disabled ship;
- b) understand the fundamentals of water tight integrity;
- c) preparation for dry-docking and undocking, with and without damage - general procedure and precautions to be observed;
- d) working knowledge of stability and trim information.

3. Legislative Requirements

- a) contents and use of Merchant Shipping Notices, Marine Guidance Notes, Marine Information Notes and the Annual Summary of Admiralty Notices to Mariners;
- b) knowledge of the application of current Merchant Shipping Health and Safety legislation, including the Code of Safe Working Practices for Merchant Seamen, and the main elements of Risk Assessment;
- c) knowledge of the relevant IMO conventions concerning safety of life at sea and protection of the marine environment;
- d) crew agreements, the official log book and the law relating to entries, inspection of living quarters and storerooms, complaints procedure;
- e) reports required by the Marine Accident Investigation Branch (MAIB);
- f) load-line marks - entries and reports in respect of freeboard, draft and allowances;
- g) the requirements of the regulations concerning life-saving and fire-fighting appliances;
- h) application of hours of work and rest legislation;
- i) the law relating to the reporting of dangers to navigation;
- j) a knowledge of the master's obligations with respect to pilotage;
- k) purpose of Flag State and Port State Control.



**MASTER – TUG LESS THAN 3000GT NEAR-COASTAL
STCW Regulation - II/2 SYLLABUS DECK – P**

Candidates should demonstrate the ability to apply the knowledge outlined in this oral examination syllabus and oral examination syllabus Deck K , by the appropriate response, anticipations and reactions to a range of routine, non-routine and contingency scenarios as presented by the examiner.

TOPIC 1 NAVIGATION

1. Plan and Conduct Safe Navigation

- a) demonstrate an ability to undertake passage planning, taking into consideration:
 - i. restricted waters;
 - ii. characteristics of the tug and tow
 - iii. meteorological conditions, through interpretation of a synoptic chart, and to forecast local area weather, the characteristics of various weather systems;
 - iv. restricted visibility;
 - v. the requirements of ship routeing and mandatory reporting systems;
 - vi. reporting in accordance with ship reporting systems;
- b) IALA systems of maritime buoyage, Region A.
- c) electronic navigational systems – limitations and sources of error, methods of correction;
- d) limitations of electronic chart systems including ECDIS and RCDS navigational chart systems;
- e) radar and ARPA – practical use of, modes of operation, limitations, sources of error and parallel indexing;
- f) AIS
- g) use, care and limitations of the gyro compass and associated equipment;
- h) sources of information, ability to use and interpret information obtained from ship borne meteorological instruments (the instruments supplied by the Meteorological Office will be taken as standard), knowledge of characteristics of various weather systems, reporting and recording systems;
- i) port radio information services, knowledge of the type of service available to aid vessels entering ports, berthing, VTIS and VTS services, as indicated in the Admiralty List of Radio Signals – Vessel Traffic Services, Port Operations and Pilot Stations.

2. Establishing Safe Watchkeeping Arrangements and Procedures

- a) a thorough knowledge on the principles of navigational watchkeeping at sea, including under pilotage, and watchkeeping at anchor and in port;
- b) a thorough knowledge of the content, application and intent of the International Regulations for preventing Collisions at sea;
- c) knowledge of the ICS Bridge Procedures Guide;
- d) understand the use of bridge equipment, including rate of turn indicators, course recorders, echo sounders, NAVTEX;
- e) knowledge of steering control systems, including automatic pilot, operational procedures and change-over from manual to automatic control and vice-versa – adjustments of controls for optimum performance; knowledge of principles of establishing a safe engineering watch at sea, anchor and in port.

3. Compasses

- a) operation and care of magnetic compasses commonly fitted on board ship – variation and deviation, causes and effects, siting of other equipment with reference to magnetic compasses;



- b) knowledge of the purpose of correctors/corrections.

4. Manoeuvre the Tug

- a) preparations for getting under way, duties prior to proceeding to sea, making harbour, entering a dock, berthing alongside quays, jetties, or other ships and securing to buoys;
- b) proper procedures for berthing and unberthing;
- c) knowledge of manoeuvring and propulsion characteristics of ships with special reference to stopping distances and turning circles at various drafts and speeds, squat and inter-action;
- d) helm orders, conning the ship, effects of propellers on the steering of a ship, effects of wind and current, stopping and going astern, turning short round;
- e) importance of navigating at reduced speed to avoid damage caused by own ship's bow wave and sternwave;
- f) choice of anchorage and working anchors in all circumstances;
- g) embarking and disembarking a pilot;
- h) precautions to be taken before the onset of heavy weather, management of ships in heavy weather, handling a disabled ship in heavy weather ;
- i) precautions when manoeuvring to launch rescue boats or survival craft in adverse weather.

TOPIC 2 RESPONSE TO EMERGENCIES

1. Response to Navigational Emergencies

- a) action to be taken when disabled and in distress, abandoning ship, survival procedures, use of rockets and rocket apparatus;
- b) measure to be taken following collision, grounding, heavy weather damage and leaks including the possibility of beaching the ship
- c) emergency towing arrangements and towing procedures;
- d) knowledge of operation of emergency steering systems;
- e) plan and co-ordinate SAR operations, including establishing and maintaining effective communications;
- f) use of the International Aeronautical and Marine Search and Rescue (IAMSAR) Manual (Volume III), distress and emergency signals; Search and Rescue around the UK.

2. Response to Other Emergencies

- a) preparation of contingency plans for response to emergencies;
- b) method of dealing with fire onboard ship; prevention of fire at sea and in port;
- c) maintenance of life saving appliances, fire fighting appliances and other safety systems;
- d) the organisation and direction of fire fighting, and life-boat and life-raft training drills;
- e) rescue from enclosed or dangerous spaces;
- f) understand the fundamental actions to be taken in the event of partial loss of intact buoyancy;
- g) action to limit damage and save the ship following fire, explosion, collision or grounding including protection of the marine environment;
- h) action to safeguard all persons on board in an emergency;
- i) action to be taken when an emergency arises in port;
- j) safety during helicopter operations;
- k) assisting a ship or aircraft in distress.

3. Communications

- a) emergency communications within the GMDSS regulations;
- b) sources of medical information available.



TOPIC 3 ONBOARD SHIP OPERATIONS

1. Pollution Prevention Requirements

- a) responsibilities under the International Convention for Prevention of Pollution including master's duties, obligations and liabilities, including the keeping of records;
- b) measures to be taken to prevent pollution in port and at sea;
- c) take appropriate action in response to pollution incidents onboard and found at sea;
- d) knowledge of the contents of the SOPEP manual, Garbage Management Plan and use of anti-pollution equipment;

2. Seaworthiness of the Tug and Tow

- a) effect upon ship behaviour of lists, stiff and tender stability conditions, large angles of heel and associated righting precautions;
- b) practical knowledge of the particular loadline items and openings affecting seaworthiness;
- c) working knowledge of stability and trim information including the importance of free surface effects and the identification and correction of an angle of loll;
- d) specific effects on stability and stress caused by ship type or nature of trade;
- e) preparations for dry-docking and undocking, with and without damage – general procedures and precautions to be observed.

3. Crew Management

- a) knowledge of personnel management, organisation and training including disciplinary procedures;
- b) application of hours of work and rest legislation.

4. Legislative Requirements

- a) contents and use of Merchant Shipping Notices, Marine Guidance Notes, Marine Information Notes and the Annual Summary of Admiralty Notices to Mariners;
- b) knowledge and application of current Merchant Shipping Health and Safety legislation, and the Code of safe Working Practices for Merchant Seamen, and the main elements of Risk Assessment;
- c) a knowledge of international conventions relevant to the operation of ships and concerning safety of life at sea and protection of the marine environment, including certificates and other documents required to be carried on board ships;
- d) requirements for statutory and classification surveys;
- e) safe manning, crew agreements, conditions of employment, and the official log book and the law relating to entries;
- f) reports required by the Marine Accident Investigation Branch;
- g) purpose and application of International Safety management (ISM) Code;
- h) purpose of Flag and Port State control;
- i) the requirements of the regulations concerning life-saving and fire-fighting appliances;
- j) requirements for drills and training;
- k) putting into port with damage to tug and/or tow from both a business and technical point of view;
- l) towage and salvage agreements;
- m) the law relating to the reporting of dangers to navigation;
- n) knowledge of the master's obligations with respect to pilotage.

