

Appendix 3 - Syllabus for AMSA oral examination, Certificates of Competency, Watchkeeper, Deck & Mate <500 GT Watchkeeper only

Notes to candidates

1. It should be noted that the following is not a fully detailed list of orals questions, but a list of topics about which the candidate is expected to have adequate knowledge, and is provided for the guidance of candidates only
2. The Examiner may ask any questions relevant to the following topic areas, and / or ask the candidate to provide answers in diagrammatic form, or to complete simple calculations, to the extent necessary to test the candidates competency in the operational and safety aspects related to the duties of the Watch-keeper Deck certificate.
3. Candidates for both Watch-keeper Deck and Mate < 500 GT (Watch-keeper only) grades of certificate can be asked questions from all sections listed, however the focus of the questions and the assessment, will be related to the main operational responsibilities and shipboard duties involved in the certificate being applied for.
4. Candidates should note that they may be required to demonstrate their proficiency in practical RADAR plotting and chart-work.
5. During the examination, candidates will be required to demonstrate that they possess an adequate knowledge and understanding in the use of the English language

Section 1: Operations

- Knowledge of appropriate Australian legislation, statutory requirements, and the application thereof.
- Knowledge of relevant International Codes and Conventions and the application thereof.
- Knowledge of a ships certification, the roll of Port State control and Flag State Control Officers and classification societies.
- Knowledge of Australian Occupational Health & Safety legislation as it applies to the maritime industry.
- Knowledge of ship and equipment surveys.
- Responsibilities and duties of shipboard personnel

Section 2: Standards of watchkeeping

- A detailed understanding of the principals to be observed in keeping a bridge watch at sea and at anchor, under pilotage as well as keeping a cargo watch.
- Bridge teamwork principles

Section 3: Bridge equipment

- Basic principles and knowledge of the different types of bridge and navigation equipment found on a ship, along with the operation, testing, errors and precautions associated with the use of such equipment.

Section 4: Navigation, charts and publications

- A full understanding of the use of the information contained in Australian, IMO, and Admiralty publications pertaining to safe navigation, and the maintenance of such publications.
- Basic knowledge of ship reporting systems and the promulgation of safety information.
- Knowledge of the information found on charts, including electronic charts, and the use of that information.
- An understanding of the general principles of voyage planning
- Aspects of practical navigation as a watchkeeper including basic tidal calculations, amplitudes and compass errors

Section 5: Stress and stability

- Knowledge of Load lines and draft marks
- Knowledge of using the ships stability booklet to assess ship stability, and the IMO minimum stability criteria.
- Knowledge of the principles of ship stability, and the ability to interpret those principles
- Basic calculations involving list and changes in density and draft.
- Basic knowledge of the different types of shipboard stresses and means of reducing such stresses.

Section 6: Cargo work

- Basic knowledge of Australian legislation, and an understanding of the general principles and safe practice, relating to the carriage, stowage, securing, loading and unloading of cargoes on various types of ships.
- Knowledge of the contents and application of the current publications for carriage of dangerous goods Knowledge of relevant cargo handling equipment
- Confined space entry principles

Section 7: Ship handling

- Basic understanding of manoeuvring techniques, principles and characteristics for the main ship types.
- Knowledge of the safe principles of mooring and unmooring,
- Basic knowledge of the use of tugs and anchors

- Knowledge of the factors affecting manoeuvring in narrow channels and shallow water
- Knowledge of the principles for the safe embarking and disembarking of a pilot, and launch and recovery of rescue craft
- Understanding the effects of adverse weather on various ship operations

Section 8: Prevention of pollution

- Knowledge of Australian and International legislation in relation to pollution, and shipboard precautions to prevent pollution.
- Understanding of the actions to be taken in event of a pollution incident
- Knowledge of bunkering precautions

Section 9: Emergency situations / Response and equipment

- Knowledge of contemporary safety issues, reports and papers, affecting the maritime industry
- Response as watch-keeper to various shipboard emergency situations both in port, at anchor and at sea
- Recognition of signs of the approach of adverse weather conditions, and action to be taken.
- Basic principles of damage control.
- Knowledge of ship/helicopter procedures
- Knowledge of principles of towing and being towed
- Distress, urgency and safety messages

Section 10: Dry docking

- Preparations for docking and undocking including stability issues
- Precautions and dangers whilst in dock, including Occupational Health & Safety issues
- Types of docking facilities

Section 11: Search and rescue

- Search and Rescue (SAR) publications, procedures, communications and equipment
- Knowledge of SAR techniques

Section 12: Essential shipboard equipment and machinery

- An understanding of the operation of various types of shipboard fire fighting and life saving equipment, together with an understanding of the associated safety aspects and precautions related to operation and use of such equipment.
- Use, care and maintenance of all relevant deck appliances and shipboard equipment.

- Knowledge of the factors affecting the watertight integrity of the ship
- Knowledge of correct operation of on load release gear for survival craft
- Organisation of statutory drills.

Section 13 Collision Avoidance

- Knowledge of the application and content of the International Regulations for Preventing Collisions at Sea, in collision avoidance and safe navigation of a ship
- Knowledge of the internationally adopted system of buoyage.
- International Code of Signals