

### **General information**

**Unit title:** Shipboard Management (SCQF level 8)

Unit code: HW79 48

Superclass:	AB
Publication date:	November 2017
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Version:	01

### Unit purpose

This unit will introduce learners to various aspects of shipboard management and safety management systems, including management of personnel, operations and resources on board in accordance with current legislative requirements.

Learners will look at the role of the senior officer with regards to health and safety, budgeting, employment law, and management of shipboard resources.

This unit is targeted towards those wishing to achieve the underpinning knowledge required for a Certificate of Competence as Chief Officer. However it may also be studied by someone who has an interest in the area.

### Outcomes

On successful completion of the unit the learner will be able to:

- 1 Analyse personnel management theory as it applies to the role of a senior officer.
- 2 Apply budgetary control in a shipboard context.
- 3 Interpret and apply employment law, quality assurance legislation and safety management systems to shipboard operations.

# **Credit points and level**

1 SQA Credit at SCQF level 8: (8 SCQF credit points at SCQF level 8)

### Recommended entry to the unit

Access to this unit is at the discretion of the centre. However learners would benefit most from this unit if they have successfully completed an Officer of the Watch Certificate of Competence, or the SQA Advanced Certificate in Nautical Science, or SQA Advanced Unit *Marine Law and Management: An Introduction.* 

## **Core Skills**

Opportunities to develop aspects of Core Skills are highlighted in the support notes for this unit specification.

There is no automatic certification of Core Skills or Core Skill components in this unit.

### **Context for delivery**

If this unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

# Equality and inclusion

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

# SQA Advanced Unit Specification: Statement of standards

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Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Where evidence for outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Learners should not know in advance the items on which they will be assessed.

# Outcome 1

Analyse personnel management theory as it applies to the role of a senior officer.

### Knowledge and/or skills

- Concepts of personnel management theory
- Methods of implementing management theory
- Methods of guidance and counselling, discipline and appraisal

## Outcome 2

Apply budgetary control in a shipboard context.

### Knowledge and/or skills

- Budgetary control theory methods
- Basic financial information

### Outcome 3

Interpret and apply employment law, quality assurance legislation and safety management systems to shipboard operations.

### Knowledge and/or skills

- Legislation regarding employment of seafarers
- Purpose of quality assurance, codes and guidance
- Methods of developing safety cultures and the role of safety management systems
- Auditing procedures

#### Evidence requirements for this unit

Learners will need to provide written and/or recorded oral evidence for all outcomes. Outcomes 1 and 2 will be assessed under open-book conditions. Access to the following is acceptable for Outcomes 1 and 2:

Accident investigation case studies for the scenario in question, such as those from the MAIB.

Four sides of hand written notes on the topics of the examination outcomes.

Use of the internet and management text books to research the theories and situations in greater depth in order to apply these to the scenario is encouraged. All items must be correctly referenced.

Outcome 3 will be assessed as a closed-book assessment under supervised conditions of two hours duration to demonstrate their knowledge and/or skills.

Learners should not know in advance the sampled items on which they will be assessed.

All knowledge and skills will be assessed, however there is sampling within each of the knowledge and skills.

#### Outcome 1

Learners will need to provide written and/or recorded oral evidence of the five knowledge and skills listed below:

Where sampling is used a different sample must be used on each assessment occasion.

- 1 Analyse the role of the senior officer in terms of management theory to a sample of any one of the following:
  - (a) Decision making processes
  - (b) Use of performance indicators and targets to monitor effectiveness
  - (c) Teamwork and team building
- 2 Apply management theory to a sample of any one of the following:
  - (a) Effective organisation of routine shipboard operations to ensure compliance with current legislation
  - (b) Implementation and monitoring of training programmes for all shipboard personnel
  - (c) Implementation of systems for effectively maintaining personnel records
  - (d) Effective organisation and recording of meetings
- 3 Discuss the role of the senior officer in giving guidance and counselling to other members of the crew and officers.
- 4 Discuss the role of the senior officer in implementing and maintaining effective disciplinary procedures on board ship.
- 5 Discuss methods of staff appraisal and their implementation in a shipboard environment.

#### Outcome 2

Learners will need to provide written and/or recorded oral evidence of the knowledge and skills listed below:

Where sampling is used a different sample must be used on each assessment occasion.

- 1 Interpret and apply budgetary theory to a sample of one of the following:
  - (a) Construction of realistic budgets and setting of targets for operations
  - (b) Analysis of fixed and variable cost items and expenditure profiles
  - (c) Analysis of variances within the budget
  - (d) Basic financial analysis and budgetary reports

#### Outcome 3

Learners will need to provide written and/or recorded oral evidence of the four knowledge and skills listed below:

Where sampling is used a different sample must be used on each assessment occasion.

- 1 Interpret and apply current legislation regarding employment of seafarers as found in merchant shipping acts to a sample of one of the following:
  - (a) Safe manning
  - (b) Hours of work
  - (c) Health and safety
  - (d) Merchant Navy Code of Conduct
  - (e) The Maritime Labour Convention
- 2 Interpret and apply current guidance regarding safety management and quality assurance legislation to a sample of one of the following:
  - (a) International Safety Management (ISM) code, and the process of certification
  - (b) Management of errors including human and system errors
  - (c) Application of British and international standard frameworks and their relationship to safety management systems and organisational operations
- 3 Analyse and implement the requirements of safety management systems to a sample of one of the following:
  - (a) Principles of safety management
  - (b) Importance of safety and creation of a safety culture on board ship
  - (c) Risk assessment procedures
  - (d) Investigation of accidents on board ship
  - (e) Role of the ship's safety committee and safety officials
- 4 Explain the concepts and practices of systematic internal auditing for a sample of one of the following:
  - (a) Depth, scope and types of internal audits
  - (b) Roles of the audit team
  - (c) Process for initiating, preparing, planning and conducting audits

# SQA Advanced Unit support notes

## **Unit title:** Shipboard Management (SCQF level 8)

Unit support notes are offered as guidance and are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

### Guidance on the content and context for this unit

This unit is designed to introduce learners to the main concepts of the management of personnel, operations and safety on board ship.

This unit forms part of the underpinning knowledge requirements for a Certificate of Competence in the Merchant Navy as Chief Mate Unlimited (STCW II/2), and reflects the content of the International Maritime Organisations' (STCW) requirements for that role.

Learners will be introduced to the various theories relating to the management of personnel and operations as applicable under current UK and international legislation.

#### Outcome 1

This outcome introduces the theory of personnel management as it relates to the shipboard environment and in a more general sense. It will explain the role of the senior officer in relation to decision making and appraisal of performance and target setting.

The senior officer's interaction with other crew members will be explored and the importance of support, guidance and counselling examined.

The management of shipboard discipline and the current legislation regarding this will be developed by means of case studies.

The role of the senior officer in the training and organisation of the crew to ensure that the vessel operates at maximum efficiency.

### Outcome 2

The use of budgetary analysis and the causes of variances from the planned budget will be discussed.

The compilation of financial records and reports will be examined and basic financial analysis will be discussed.

It also considers the duties of the ship's officer in setting and ensuring that operations are carried out within prescribed budgetary controls.

#### Outcome 3

This outcome examines the interpretation and application of current UK and international law regarding the employment of seafarers.

In particular the law regarding the safe manning of vessels and hours of work legislation will be examined and the implications of these on the safe management of shipboard operations considered.

The maritime labour convention will be covered, giving in depth knowledge into seafarers wages, welfare and employment agreements.

It also deals with the implementation of the ISM code and its impact on the management of safety on board the ship.

The need to develop a safety culture and implement risk assessment procedures will be explained and the roles and responsibilities of the vessel's safety committee and safety officials discussed.

The need for audits and procedures for investigating and reporting accidents will be considered and the related documentation and records discussed

### Guidance on approaches to delivery of this unit

Lessons for this subject should be delivered in a classroom environment. There are no specialist materials required for this subject, although all material delivered should be in accordance with current industry guidance such as the Code of Safe Working Practices and the appropriate M-notices, which are all available online via the Maritime and Coastguard Agency Website.

There are no requirements for specialist teaching qualifications required however staff teaching the subject should have a good understanding of the materials and a sound practical understanding of the concepts being delivered.

When undertaking this unit it is expected that learners will have some prior knowledge or experience of how a ship is managed. Such knowledge will have been gained from practical experience, or study at a previous level.

Learners will benefit most if this unit is delivered in conjunction with the SQA Advanced Unit *Shipmasters Law and Business*. The knowledge and skills developed within the unit should be applied in the context that will be encountered aboard ship while holding the role of senior officer. This unit is ideally leading the learner towards the ability to be able to handle day to day personnel management as a senior officer.

### Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

Consideration may be given to the use of plagiarism detection software to authenticate the learners work for assignments.

Learners will need to provide written and/or recorded oral evidence for all outcomes. Outcomes 1 and 2 will be assessed under open-book conditions. It is recommended the assessment takes the form of a case study assignment or similar to allow learners to apply what they have learned to a realistic situation.

Access to the following is acceptable for Outcomes 1 and 2:

Accident investigation case studies for the scenario in question, such as those from the MAIB.

Four sides of hand written notes on the topics of the examination outcomes.

Use of the internet and management text books to research the theories and situations in greater depth in order to apply these to the scenario is encouraged. All items must be correctly referenced.

Outcome 3 will be assessed as a closed-book assessment under supervised conditions of two hours duration to demonstrate their knowledge and/or skills. It is recommended the assessment takes the form of a question paper.

### **Opportunities for e-assessment**

E-assessment may be appropriate for some assessments in this unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the evidence requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at **www.sqa.org.uk/e-assessment**.

## **Opportunities for developing Core and other essential skills**

There are opportunities to develop the Core Skill of *Communication* in all three disciplines at SCQF level 6.

*Communication*: Oral can be developed within the context of group work and role play where learners will be encouraged to express opinions and present rational arguments for and against a position.

*Communication*: Reading will be developed by learners having to comprehend complex legislation regarding management of shipboard operations and safety procedures.

*Communication*: Written can be developed within the assessment regime as learners will have to produce a well written assignment in which they clearly present information.

*Problem Solving*: Critical Thinking can be developed by having learners analyse conflict situations that may arise in the workplace and then evaluate the necessary approaches required to resolve the situation.

*Problem Solving*: Planning and Organising can be developed by allowing learners to plan and organise their own time and research requirements for completing the assignment.

*Problem Solving*: Reviewing and Evaluating may be developed when learners consider safety management systems on board ships. This requires seafarers to evaluate the effectiveness of the system when accidents or dangerous incidents occur and they will then review existing procedures and amend them accordingly.

Working with Others can be developed during group work and role playing.

## History of changes to unit

Version	Description of change	Date

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SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of SQA Advanced Qualifications.

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# **General information for learners**

## **Unit title:** Shipboard Management (SCQF level 8)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

This unit is designed to introduce you to the theory and principles of typical management scenarios found on board ships.

You will learn about the management of personnel and the different styles of management that you may come across. The role of the senior officer as a manager will be discussed in detail, with particular emphasis on the disciplinary, guidance and counselling aspects of his role.

The role of the senior officer in ensuring that the crew are involved in the organisation of training of fellow crew to ensure that the vessel operates at maximum efficiency will be examined and the current legislation discussed.

You will also consider the duties of the ship's officer in planning and ensuring operations are carried out in a cost effective manner, with the best utilisation of personnel and resources.

The use of budgetary analysis and the causes of variances from the planned budget will be discussed.

The compilation of financial records and reports will be examined and basic financial analysis will be discussed.

Current legislation on the employment of seafarers and their rights will be covered in depth with particular regard to National UK laws and also those enforced by the International Labour Organisation (ILO). The implication of hours of work legislation on the operation of the vessel will be analysed and the criteria for the issue of a safe manning certificate explained.

The requirements of the ISM code and the impact on the ship's routeing operations considered.

You will also be asked to discuss the concept of a safety culture on board ship and have to plan how to implement this on board a vessel.

The first part of the unit will cover concepts of personnel management theory, methods of implementing management theory, methods of guidance and counselling, budgets, discipline and appraisal and will be assessed by open-book assessment which may be a case study assignment or similar.

The final part of the unit, which covers legislation regarding employment of seafarers; purpose of quality assurance, codes and guidance; methods of developing safety cultures; and the role of safety management systems and auditing procedures will be assessed by a closed-book assessment which may be a question paper and last for up to two hours.