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**SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)**

In accordance with Regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

**Maritime Defence**

registered by Organising Field 08 – Law, Military Science and Security, publishes the following Qualification and Unit Standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Qualification and Unit Standards. The full Qualification and Unit Standards can be accessed via the SAQA web-site at [www.saqqa.org.za](http://www.saqqa.org.za). Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the Qualification and Unit Standards should reach SAQA at the address below and **no later than 17 November 2008**. All correspondence should be marked **Standards Setting – SGB for Maritime Defence** and addressed to

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ACTING DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

**QUALIFICATION:**  
**National Certificate: Warship Operations**

SAQA QUAL ID		QUALIFICATION TITLE	
64129		National Certificate: Warship Operations	
ORIGINATOR		PROVIDER	
SGB Maritime Defence			
QUALIFICATION TYPE	FIELD	SUBFIELD	
National Certificate	8 - Law, Military Science and Security	Sovereignty of the State	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUAL CLASS
Undefined	131	Level 5	Regular-Unit Stds Based

***This qualification does not replace any other qualification and is not replaced by another qualification.***

**PURPOSE AND RATIONALE OF THE QUALIFICATION**

**Purpose:**

Learners completing this Qualification will typically be deployed as warfare operations officers on a warship. In this context the learner will be responsible for the directing of combat operations on a warship in either the anti-air, anti-surface and sub-surface warfare role. Further, in the broader context, the learner will use these knowledge and skills to contribute to the defence of South African territorial waters and/or area of responsibility against possible naval threats, thus providing a safer and secure country for social and economic growth.

Recipients of this qualification will be able to:

- > Communicate effectively in an operational context.
- > Conduct naval missions.
- > Carry out an operational watch.
- > Conduct specialised naval operations.
- > Fight the platform and combined force.

**Rationale:**

This Qualification meets the needs of the Maritime Defence Sector by providing standards against which senior naval officers can be trained. This Qualification meets the needs of society by providing competent naval officers who are able to direct a warship in a naval battle and thereby contribute to securing the national assets and thereby the sovereignty of the Republic of South Africa.

The majority of the candidates for this qualification are likely to have at least ten to fifteen years experience as a naval officer and served in various capacities on a warships. This qualification is the third in the progressive development of officer skills for the SA Navy. This Qualification will allow learners' access to the National Certificate: Warship Command and Control, NQF Level 6. Further this Qualification will allow the learner access to Sovereignty of the State developmental Qualifications such as the National Diploma: Joint and Multi-National Operations, NQF Level 6 and the National Certificate: National Defence and Security, NQF Level 7.

This Qualification has been purpose-built for the Sovereignty of the State sub-field, the Maritime Defence Sector and naval officers in their capacity as combat officers. Further this Qualification contributes to an integrated National Qualifications Framework; provides for access, mobility and progression within the South African National Defence Force career path; enhances the quality of training within the SA Navy; allows for the redress of the past and contributes to the development of the learner as an officer within the South African National Defence Force.

### **RECOGNIZE PREVIOUS LEARNING?**

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### **LEARNING ASSUMED IN PLACE**

It is assumed that the learner has the following knowledge and skills:

- > Communication at NQF Level 4.
- > Mathematics at NQF Level 4.

Recognition of Prior Learning:

This Qualification makes the Recognition of Prior Learning possible, if the learner is able to demonstrate competence in the knowledge, skills, values and attitudes implicit in this Marketing Qualification. Recognition of Prior Learning will be done by means of an Integrated Assessment as mentioned in the previous paragraph.

This Recognition of Prior Learning may allow:

- > For accelerated access to further learning.
- > Gaining of credits towards a unit standard.
- > For full or partial recognition of the Qualification.

All recognition of Prior Learning is subject to quality assurance by the relevant accredited Education, Training, Quality, and Assurance Body and is conducted by a registered workplace assessor. Because the standards are only core and fundamental, these standards may have been acquired in a range of economic sectors and these will be recognized as appropriate.

Access to the Qualification:

There is an open access to this qualification for learners:

- > Who are possession of a NQF Level 4 Qualification, such as a National Senior Certificate or the National Certificate: Vocational, NQF Level 4, and
- > Who have successfully completed the FETC: Harbour Watchkeeping.

### **QUALIFICATION RULES**

The Qualification consists of a Fundamental, a Core and an Elective Component.

To be awarded the Qualification learners are required to obtain a minimum of 131 credits as detailed below:

Fundamental Component:

- > The Fundamental Component consists of Unit Standards to the value of 22 credits all of which are compulsory.

Core Component:

> The Core Component consists of Unit Standards to the value of 105 credits all of which are compulsory.

Elective Component:

> The Elective Component consists of individual unit standards from which the learner must choose unit standards totalling a minimum of 4 credits.

### **EXIT LEVEL OUTCOMES**

1. Communicate effectively in an operational context.

2. Conduct naval missions.

3. Carry out an operational watch.

4. Conduct specialised naval operations.

5. Fight the platform and combined force.

Critical Cross-Field Outcomes:

This qualification promotes, in particular, the following Critical Cross-Field Outcomes:

Identifying and solving problems in which responses display that responsible decisions using critical and creative thinking have been made when:

- > Conducting naval missions.
- > Carrying out an operational watch.
- > Conducting specialised naval operations.
- > Fighting the platform and combined force.

Working effectively with others as a member of a team, group, organisation, and community during:

- > The conducting of naval missions.
- > The carry out an operational watch.
- > The conducting of specialised naval operations.
- > The fighting from a platform and combined force.

Organising and managing oneself and one's activities responsibly and effectively when:

- > Conducting naval missions.
- > Carrying out an operational watch.
- > Conducting specialised naval operations.
- > Fighting from the platform and combined force.

Communicate effectively using visual, mathematical and/or language in the modes of oral and/or written persuasion when:

- > Communicating in an operational context.
- > Conducting naval missions.
- > Carrying out an operational watch.
- > Conducting specialised naval operations.
- > Fighting from the platform and combined force.

Collecting, analysing, organising and critically evaluating information to better understand and explain:

> Naval missions and combat.

Using science and technology effectively and critically, showing responsibility towards the environment and health of others when:

- > Communicating in an operational context.
- > Conducting naval missions.
- > Carrying out an operational watch.
- > Conducting specialised naval operations.

Demonstrating an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation when:

- > Conducting naval missions.
- > Conducting specialised naval operations.

#### **ASSOCIATED ASSESSMENT CRITERIA**

Associated Assessment Criteria for Exit Level Outcome 1:

- 1.1 Communication principles, strategies and processes within the warship environment are applied so that communication is clear and decisive and enhances leadership performance.
- 1.2 Communications in times of conflict or potential conflict are clear, concise and correct according to naval and military terminology.

Associated Assessment Criteria for Exit Level Outcome 2:

- 2.1 Planning and preparation is conducted so as to ensure that all factors at tactical level are considered and that operational readiness is achieved at the required time.
- 2.2 The mission plan is executed according to mission command principles, the command aim and within the capabilities and limitations of the ship.
- 2.3 Naval missions are executed in accordance with national and international legislation, regulations and policy.
- 2.4 Missions are evaluated in order to identify areas of strength and success as well as areas for improvement which can be rectified into training evolutions.

Associated Assessment Criteria for Exit Level Outcome 3:

- 3.1 Above and below water sensors are used in an integrated manner to create a recognised maritime picture.
- 3.2 The action information organisation is employed in the gathering of information and creation of the recognised maritime picture.
- 3.3 Information is communicated clearly and timeously to the benefit of own vessel and other friendly forces in accordance with established communication protocols.

Associated Assessment Criteria for Exit Level Outcome 4:

- 4.1 A range of special purpose missions are executed according to specified procedures and naval doctrine.
- 4.2 Aircraft capabilities are applied within the naval context.
- 4.3 Aircraft are directed during naval support missions.

Associated Assessment Criteria for Exit Level Outcome 5:

- 5.1 The platform is positioned to maximum effect for particular tactical requirements.
- 5.2 Anti-air, submarine and/or surface warfare is directed in line with naval doctrine and tactical procedures for unit and force level engagements.
- 5.3 Operations are directed against multiple threats which are recognised, prioritised and responded to calmly, confidently and creatively and in line with naval doctrine and tactics.

#### **Integrated Assessment:**

Because assessment practices must be open, transparent, fair, valid, and reliable and ensure that no learner is disadvantaged in any way whatsoever, an integrated assessment approach is incorporated into the Qualification. Learning, teaching and assessment are inextricably linked. Whenever possible, the assessment of knowledge, skills, attitudes and values shown in the unit standards should be integrated.

A variety of methods must be used in assessment and tools and activities must be appropriate to the context in which the learner is working. Where it is not possible to assess the learner in the workplace or on-the-job, simulations, case studies, role-plays and other similar techniques should be used to provide a context appropriate to the assessment.

The term 'Integrated Assessment' implies that theoretical and practical components should be assessed together. During integrated assessments the assessor should make use of formative and summative assessment methods and assess combinations of practical, applied, foundational and reflective competencies.

Assessors and moderators should make use of a range of formative and summative assessment methods. Assessors should assess and give credit for the evidence of learning that has already been acquired through formal, informal and non-formal learning and work experience.

Assessment should ensure that all Specific Outcomes, Essential Embedded Knowledge and Critical Cross-Field Outcomes are assessed. The assessment of the Critical Cross-Field Outcomes should be integrated with the assessment of Specific Outcomes and Essential Embedded Knowledge.

#### **INTERNATIONAL COMPARABILITY**

##### **Best Practice:**

The Seafarer's Training, Certification and Watchkeeping Code. All navies and maritime organisations comply with the Seafarer's Training, Certification and Watchkeeping Codes. This leads to a substantial degree of uniformity in a highly regulated environment and this qualification was developed bearing in mind the Code.

##### **The Seafarer's Training, Certification and Watchkeeping Code:**

Seafarer's Training, Certification and Watchkeeping Code as adopted by the 1995 Conference of the International Maritime Organization and recognises the specific roles and responsibilities of a watchkeeper. It lays down duties and responsibilities and provides standards and criteria for the learning and assessment of watchkeepers. Signatories to the Convention include 71 countries, amongst them leading seafaring nations such as; Argentina, Australia, Canada, China, Denmark, Finland, France, Germany, India, Japan, Netherlands, New Zealand, Norway, Portugal, Russian Federation, South Africa, Spain, Sweden, and the United Kingdom.

##### **Areas of specified competence include:**

- > Plan and conduct a passage and determine position.
- > Maintain a safe navigational watch.

- > Use of radar and Automatic Radar Plotting Aids to maintain navigational safety.
- > Respond to emergencies.
- > Respond to a distress signal at sea.
- > Use the Standard Navigational Vocabulary as replaced by the IMO Standard Marine Communication Phrases, and use English in written and oral form.
- > Transmit and receive information by visual signaling.
- > Manoeuvre the ship.
- > Monitor the loading, stowage, securing, care during voyage and unloading of cargoes.
- > Inspect/report defects and damage to cargo spaces, hatch covers and ballast tanks.
- > Compliance with pollution-prevention requirements.
- > Maintenance of seaworthiness of the vessel.
- > Prevention, control and fighting of fires on board.
- > Operation of life-saving appliances.
- > First aid on board ship.
- > Compliance with legislative requirements.

#### Findings:

All of these areas are either addressed in the FETC: Harbour Watchkeeping, the National Certificate: Vessel Safety Practices, NQF Level 5 or this Qualification, the National Certificate: Warship Operations, NQF Level 5.

#### Conclusion:

The National Certificate: Warship Operations, Level 5 deals with some of the requirements of the Seafarer's Training, Certification and Watchkeeping Code and therefore, due to its international acceptance, also compares favourably to a majority of foreign navies. Once the South African naval officer has completed the FETC: Harbour Watchkeeping, the National Certificate: Vessel Safety Practices, Level 5 and this Qualification, the National Certificate: Warship Operations, NQF Level 5 would they have achieved all the competencies of the Seafarer's Training, Certification and Watchkeeping Code.

#### **ARTICULATION OPTIONS**

This Qualification lends itself to both vertical and horizontal articulation possibilities.

Horizontal articulation is possible with the following Qualifications:

- > National Certificate: Vessel Safety Practices, Level 5 (Under Construction).
- > ID 58840: National Certificate: Submarine Operations, NQF Level 5.
- > ID 57714: National Certificate: Marine Pilotage, NQF Level 5.

Vertical articulation is possible with the following qualifications:

- > ID 58783: National Certificate: Warship Command and Control, NQF Level 6.
- > ID 49783: National Diploma: Joint and Multi-National Operations, Level 6.

#### **MODERATION OPTIONS**

> Anyone assessing a learner or moderating the assessment of a learner against this Qualification must be registered as an assessor with the relevant Education, Training, Quality, and Assurance (ETQA) Body.

> Any institution offering learning that will enable the achievement of this Qualification must be accredited as a provider with the relevant ETQA.

> Assessment and moderation of assessment will be overseen by the relevant ETQA according to the ETQA's policies and guidelines for assessment and moderation; in terms of agreements

reached around assessment and moderation between ETQA's (including professional bodies); and in terms of the moderation guideline detailed immediately below.

> Moderation must include both internal and external moderation of assessments at exit points of the Qualification, unless ETQA policies specify otherwise. Moderation should also encompass achievement of the competence described both in individual unit standards, the integrated competence described in the Qualification.

> Anyone wishing to be assessed against this Qualification may apply to be assessed by any assessment agency, assessor or provider institution that is accredited by the relevant ETQA.

### **CRITERIA FOR THE REGISTRATION OF ASSESSORS**

For an applicant to register as an assessor, the applicant needs:

- > A minimum of 2 (two) years' practical, relevant occupational experience.
- > A relevant Qualification at NQF Level 5 or higher.
- > To be registered as an assessor with the relevant ETQA.

### **NOTES**

N/A

### **UNIT STANDARDS**

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Fundamental	117985	Demonstrate an understanding of the Law of Armed Conflict during multi-national operations	Level 5	10
Fundamental	259540	Plan a naval operation at tactical level	Level 5	12
Core	120394	Apply communication principles, strategies and processes in a leadership role	Level 4	6
Core	244644	Distribute information and control traffic on voice and data nets during operations	Level 4	3
Core	244642	Manage and conduct operations in a multi-threat environment	Level 4	6
Core	244649	Manoeuvre and position the platform for tactical purposes	Level 4	8
Core	244645	Achieve and maintain a state of operational readiness.	Level 5	4
Core	259537	Carry out watch keeping operations in the Operation Room	Level 5	6
Core	244650	Create and maintain a recognised maritime picture	Level 5	5
Core	259539	Create and maintain a situation picture using sensors	Level 5	10
Core	244638	Demonstrate understanding of the principles of mission command	Level 5	8
Core	244652	Direct special purpose missions	Level 5	10
Core	259557	Direct warfare domains at unit and force level	Level 5	20
Core	244651	Evaluate and report on missions	Level 5	3
Core	259538	Execute a mission plan	Level 5	12
Core	244637	Execute optimum weapons employment	Level 5	4
Elective	244524	Demonstrate understanding vessel systems and capabilities	Level 5	6
Elective	259577	Direct and control aircraft from a surface vessel	Level 5	20
Elective	244624	Plan and control vessel operating costs	Level 5	4
Elective	244533	Conduct military missions in accordance with national and naval doctrine	Level 6	8
Elective	244548	Execute a peace support operation	Level 6	6

### **LEARNING PROGRAMMES RECORDED AGAINST THIS QUALIFICATION**

None



## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

**UNIT STANDARD:*****Carry out watch keeping operations in the Operation Room***

SAQA US ID	UNIT STANDARD TITLE		
259537	Carry out watch keeping operations in the Operation Room		
ORIGINATOR	PROVIDER		
SGB Maritime Defence			
FIELD	SUBFIELD		
8 - Law, Military Science and Security	Sovereignty of the State		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	6

***This unit standard does not replace any other unit standard and is not replaced by another unit standard.***

**SPECIFIC OUTCOME 1**

Prepare to carry out watch keeping operations in the operations room.

**SPECIFIC OUTCOME 2**

Direct vessel and fleet operations in the operations room.

**SPECIFIC OUTCOME 3**

Control the action information organisation.

**SPECIFIC OUTCOME 4**

Gather intelligence during an operation room watch.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

	ID	QUALIFICATION TITLE	LEVEL
Core	64129	National Certificate: Warship Operations	Level 5



## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

**UNIT STANDARD:*****Execute a mission plan***

<b>SAQA US ID</b>	<b>UNIT STANDARD TITLE</b>		
259538	Execute a mission plan		
<b>ORIGINATOR</b>			<b>PROVIDER</b>
SGB Maritime Defence			
<b>FIELD</b>			<b>SUBFIELD</b>
8 - Law, Military Science and Security			Sovereignty of the State
<b>ABET BAND</b>	<b>UNIT STANDARD TYPE</b>	<b>NQF LEVEL</b>	<b>CREDITS</b>
Undefined	Regular	Level 5	12

***This unit standard does not replace any other unit standard and is not replaced by another unit standard.***

**SPECIFIC OUTCOME 1**

Execute planning and provisioning requirements of the mission plan.

**SPECIFIC OUTCOME 2**

Conduct briefings in response to threat appreciation and safety management.

**SPECIFIC OUTCOME 3**

Develop tactics for naval missions.

**SPECIFIC OUTCOME 4**

Contribute to safety during mission execution.

**SPECIFIC OUTCOME 5**

Evaluate the mission planning execution process.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

	<b>ID</b>	<b>QUALIFICATION TITLE</b>	<b>LEVEL</b>
Core	64129	National Certificate: Warship Operations	Level 5



## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

**UNIT STANDARD:****Create and maintain a situation picture using sensors**

SAQA US ID	UNIT STANDARD TITLE		
259539	Create and maintain a situation picture using sensors		
ORIGINATOR	PROVIDER		
SGB Maritime Defence			
FIELD	SUBFIELD		
8 - Law, Military Science and Security	Sovereignty of the State		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	10

***This unit standard does not replace any other unit standard and is not replaced by another unit standard.***

**SPECIFIC OUTCOME 1**

Manage a sensor operation.

**SPECIFIC OUTCOME 2**

Manage a situation picture using sensors.

**SPECIFIC OUTCOME 3**

Interpret data and provide sensor intelligence to command.

**SPECIFIC OUTCOME 4**

Resolve information conflicts of sensor operation.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

	ID	QUALIFICATION TITLE	LEVEL
Core	64129	National Certificate: Warship Operations	Level 5



# SOUTH AFRICAN QUALIFICATIONS AUTHORITY

## UNIT STANDARD:

### *Plan a naval operation at tactical level*

SAQA US ID	UNIT STANDARD TITLE		
259540	Plan a naval operation at tactical level		
ORIGINATOR	PROVIDER		
SGB Maritime Defence			
FIELD	SUBFIELD		
8 - Law, Military Science and Security	Sovereignty of the State		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	12

***This unit standard does not replace any other unit standard and is not replaced by another unit standard.***

#### SPECIFIC OUTCOME 1

Conduct an analysis of directives received from within the chain of command.

#### SPECIFIC OUTCOME 2

Develop a threat appreciation.

#### SPECIFIC OUTCOME 3

Establish internal and force communications.

#### SPECIFIC OUTCOME 4

Establish emission control and security policies.

#### SPECIFIC OUTCOME 5

Allocate weapons and systems at the planning stage.

#### SPECIFIC OUTCOME 6

Evaluate the mission planning process.

#### QUALIFICATIONS UTILISING THIS UNIT STANDARD

ID	QUALIFICATION TITLE	LEVEL
Fundamental 64129	National Certificate: Warship Operations	Level 5



## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

**UNIT STANDARD:*****Direct warfare domains at unit and force level***

<b>SAQA US ID</b>		<b>UNIT STANDARD TITLE</b>	
259557		Direct warfare domains at unit and force level	
<b>ORIGINATOR</b>		<b>PROVIDER</b>	
SGB Maritime Defence			
<b>FIELD</b>		<b>SUBFIELD</b>	
8 - Law, Military Science and Security		Sovereignty of the State	
<b>ABET BAND</b>	<b>UNIT STANDARD TYPE</b>	<b>NQF LEVEL</b>	<b>CREDITS</b>
Undefined	Regular	Level 5	20

***This unit standard does not replace any other unit standard and is not replaced by another unit standard.***

**SPECIFIC OUTCOME 1**

Demonstrate understanding of the combat context.

**SPECIFIC OUTCOME 2**

Demonstrate understanding of combat doctrine.

**SPECIFIC OUTCOME 3**

React to unfolding threats under combat condition.

**SPECIFIC OUTCOME 4**

Co-ordinate air fighter defence with the ship's defence systems.

**SPECIFIC OUTCOME 5**

Direct frigate mine warfare operations.

**SPECIFIC OUTCOME 6**

Evaluate domain warfare tactics.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

	<b>ID</b>	<b>QUALIFICATION TITLE</b>	<b>LEVEL</b>
Core	64129	National Certificate: Warship Operations	Level 5



## SOUTH AFRICAN QUALIFICATIONS AUTHORITY

**UNIT STANDARD:*****Direct and control aircraft from a surface vessel***

SAQA US ID	UNIT STANDARD TITLE		
259577	Direct and control aircraft from a surface vessel		
ORIGINATOR	PROVIDER		
SGB Maritime Defence			
FIELD	SUBFIELD		
8 - Law, Military Science and Security	Sovereignty of the State		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	20

***This unit standard does not replace any other unit standard and is not replaced by another unit standard.***

**SPECIFIC OUTCOME 1**

Demonstrate knowledge of aviation organisations.

**SPECIFIC OUTCOME 2**

Demonstrate knowledge of aircraft and aviation safety procedures and programmes.

**SPECIFIC OUTCOME 3**

Demonstrate knowledge of aircraft capabilities and limitations.

**SPECIFIC OUTCOME 4**

Demonstrate knowledge of airspace management and onboard launch and recovery procedures.

**SPECIFIC OUTCOME 5**

Provide joining information to inbound helicopters.

**SPECIFIC OUTCOME 6**

Demonstrate knowledge of aircraft missions and naval tactics for fixed wing and rotary wing aircraft under warfare conditions.

**SPECIFIC OUTCOME 7**

Direct aircraft to pre-determined points to achieve mission aim.

**QUALIFICATIONS UTILISING THIS UNIT STANDARD**

	ID	QUALIFICATION TITLE	LEVEL
Elective	64129	National Certificate: Warship Operations	Level 5