



## 1. SCOPE

All small power-driven vessel owners requiring a sea-going competency certification.

## 2. CERTIFICATE

SAMSA Small Power-driven Vessel Certificate of Competence (ocean-going, either at Day or Coastal Skipper level)

## 3. ISSUING AUTHORITY

The South African Maritime Safety Authority. The information outlined in this document is based on and extracted from *Marine Notice no. 13 of 2007*, as issued by the South African Maritime Safety Authority. This document spells out the SAMSA policy on small vessel surveys, certification and numbering, and skipper qualification and certification, in terms of the promulgated Merchant Shipping (National Small Vessel Safety) Regulations, 2007 (as amended).

## 4. COURSE ORGANISER

The South African Small Craft Association as a SAMSA appointed Authorised Agency.

## 5. SMALL VESSELS PERTAINING TO COURSE

Category A	Vessel operating more than 40 nautical miles offshore
Category B	Vessel operating more than 15 but not more than 40 nautical miles offshore
Category C	Vessel operating more than 5 but not more than 15 nautical miles offshore
Category D	Vessel operating more than 1 but not more than 5 nautical miles offshore
Category E	Vessel operating not more than 1 nautical miles offshore

## 6. COURSE DURATION

The lectures of a course offered for the small vessel certificate of competency (Coastal Skipper) should occupy a period of at least 20 hours. The full course should be run over a period of at least two weeks to allow the candidate time to study and practice the notes given in the course. This is an essential requirement in the syllabus applicable to the rule of the road and navigation.

## 7. SYLLABUS AND PASS MARKS

The syllabus and examination paper for the small power-driven vessel certificate of competence is divided into the following sections:

Section	Subject matter	To be completed by	Pass mark
A(1)	General seamanship, legal knowledge, rule of the road and the marine environment.	All candidates.	60%
A(2)	Safety afloat and emergency procedures	All candidates.	60%
A(3)	General first aid.	All candidates. <i>Not required if already in possession of a valid</i>	60%

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		<i>marine orientated first aid certificate.</i>	
B	Radio procedures and frequencies. The phonetic alphabet.	All candidates wanting any Cat. A to D class certificate. Not required if already in possession of a recognised radio operators certificate.	60%
C(1)	Responsibilities between different types of vessels specified in the rule of the road.	All candidates.	60%
C(2)	Identification of lights at night specified in the rule of the road.	All candidates wanting a certificate for night operation.	60%
D	Knowledge of the compass, variation, deviation and the deviation card.	All candidates.	60%
E	Chart work and navigation	All candidates wanting a certificate issued for Cat. A to D vessels.	60%

The minimum standard of knowledge required in the different sections of the syllabus is as follows:

### Section A(1)

#### General Seamanship, Legal Knowledge, Rule of the Road and Marine Environment

##### General Seamanship

- A(1).1 Basic nautical terms. Direction and bearing identification relative to the fore and aft line of a boat.
- A(1).2 An outline knowledge of the different categories of vessels and the distances they are permitted to operate offshore.
- A(1).3 Name and identify parts of a small vessel.
- A(1).4 Pre-launch routine.
- A(1).5 Operating small craft and helmsmanship.
- A(1).6 Launching and landing through surf. Precautions to take. Dangers involved.
- A(1).7 Weight distribution and importance of correct trim. Speed adjustment to suit conditions.
- A(1).8 Proper maintenance and upkeep of craft and equipment. After-use routine.
- A(1).9 The dangers associated with different types of ropes constructed from man-made fibres.
- A(1).10 Demonstrate the ability to make a clove-hitch, bowline, reef knot and sheet bend.
- A(1).11 Anchors. Types and the appropriate usage of different types. Describe anchoring techniques and tripping an anchor. Dangers associated with the use of a grapnel anchor and having a weak link in the system.
- A(1).12 Sea anchor. Construction. When and how used.
- A(1).13 Propulsion. Safe operation of outboard and inboard motors. Routine maintenance. Tools and spares required. Basic knowledge of emergency repairs and fault finding. Reviving a flooded or submerged motor. The "dead man" switch. Power to boat size ratio and fuel consumption.
- A(1).14 Meaning and identification of the international code flags A, C, N, V and W.
- A(1).15 Knowledge of available coastal radio services.
- A(1).16 Navigation warnings.

##### Legal knowledge and rule of the road

- A(1).17 Safety, construction and seaworthiness regulations. Certificate of fitness. Validity. Contents and conditions for issue. Identification of a vessel. Approved marking.
- A(1).18 Steps to be taken when selling a registered small vessel.
- A(1).19 Steps to be taken in the event of a casualty. What represents a casualty. Responsibilities in the event of a casualty.
- A(1).20 Launching sites and no-go areas in respect of bathers.
- A(1).21 Basic working knowledge of the application of the International Regulations for Preventing Collisions at Sea.

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- A(1).22 Responsibilities and give-way actions between power-driven vessels, power-driven and sailing vessels and power-driven and fishing vessels in sight of one another. Manoeuvring signals. Precautions and responsibilities when rounding a breakwater.
- A(1).23 The importance of keeping a proper lookout. Keeping clear of shipping channels and diving operations.
- A(1).24 Prohibitions on dumping of plastics, rubbish and oil into the sea. Penalties applicable.
- A(1).25 The responsibilities of a skipper in respect of: the safety of the vessel and her crew in all aspects of her operation; divers working from his vessel; approaching conditions of reduced visibility; and approaching storm conditions.

**Marine Environment**

- A(1).25 A basic understanding and making use of a synoptic chart based on a general understanding of the following weather phenomena: Pressure systems with their associated wind and weather patterns; cold fronts; cyclones; pressure gradients, how they effect wind strength and direction; land and sea breezes; Berg winds; the Cape South Easter and the Westerly Buster.
- A(1).26 The use of the barometer to predict weather.
- A(1).27 Weather reports. Their use and where obtained from.
- A(1).28 A brief knowledge of the Beaufort wind scale.
- A(1).29 A basic understanding of the wind and sea conditions which would be dangerous for a small vessel to proceed to sea.
- A(1).30 A basic understanding of the formation of waves, currents (including longshore and rip currents) and tides.

**Section A(2)**

**Safety Afloat and Emergency Procedures**

- A(2).1 Pre-departure safety. Steps to be taken including: weather check, equipment and vessel check-list, crew briefing. Voyage details: contents, reasons for and who left with.
- A(2).2 Built-in buoyancy and the alternative. Colour vessel. Reasons for these requirements.
- A(2).3 Safety equipment required on a small vessel. Maintenance, stowage and proper use.
- A(2).4 Assisting and towing other craft at sea.
- A(2).5 Boat handling under adverse weather conditions.
- A(2).6 Safety in loading. Dangers associated with overloading a vessel. The capsize (free surface) effect of a layer of water on the deck of a ski-boat.
- A(2).7 Dangers of a following sea. Steps to take in the event of a vessel starting to surf (broaching)
- A(2).8 Man overboard procedure.
- A(2).9 Fire at sea procedures. Fire extinguishers - types, number required and proper use.
- A(2).10 Distress signals available for use on the respective categories of small vessel. Identification of distress signals. Responsibility of the skipper on sighting a distress signal. When used. Demonstrate use of (oral exam). Penalty for misuse. Colour significance of distress flares.
- A(2).11 Capsized boat procedures. Steps to take in the event of a capsize. Danger of swimming for the shore.
- A(2).12 Dangers and prevention of exposure and hypothermia. Protective clothing.
- A(2).13 Demonstrate correct manner of donning an approved lifejacket. Checks on the condition of a lifejacket. The danger of leaving a weight pressing on a lifejacket constructed of closed cell foam. Meaning of colour and reflector tape. When lifejackets are to be donned.
- A(2).14 The precautions to be observed when dealing with petrol vapours and inboard petrol engines.

**Section A(3)**

**General First Aid**

- A(3).1 Knowledge of the circulatory and respiration systems.
- A(3).2 Wounds and the stopping of bleeding.
- A(3).3 Basic first aid techniques; Mouth-to-mouth resuscitation; and Cardio-pulmonary-resuscitation. The

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- recovery position.
- A(3).4 Treatment of fractures and basic splints.
- A(3).5 Near drowning.
- A(3).6 The effects of extremes of temperature.
- A(3).7 Acute seasickness
- A(3).8 Handling and transport of injured crew member.
- A(3).9 Marine related injuries - blue bottle and jelly fish stings, fish bites, etc.

### Section B

#### Radio Procedures and Frequencies. The Phonetic Alphabet

- B.1 Difference between VHF and land mobile (29 MHz). Advantages of each type. Use of the appropriate channels.
- B.2 Do's and don'ts in radio procedure. Silent period. Different types of message. (Mayday, Pan and Securite).
- B.3 Radio procedure for general communications.
- B.4 Procedure for a distress message.
- B.5 The phonetic alphabet.
- B.6 Basic fault finding.

### Section C(1)

#### Responsibilities between different Types of Vessels specified in the Rules of the Road

- C(1).1 A knowledge of the different types of vessels defined in the rule of the road. Namely, a power-driven vessel, sailing vessel, a vessel engaged in fishing, a vessel not under command, a vessel restricted in her ability to manoeuvre, a vessel constrained by her draft and a vessel at anchor.
- C(1).2 The responsibilities between the different types of vessels listed in point C(1).1.
- C(1).3 The actions required by the stand-on vessel and the give-way vessel when power-driven vessels are in sight of one another in: the crossing situation, the overtaking situation and the head-on situation.
- C(1).4 A knowledge of the day time shapes required to be displayed by the vessels listed in point C(1).1.

### Section C(2)

#### Identification of the Lights required at Night specified in the Rules of the Road

- C(2).1 Characteristics of the different types of lights such as, masthead, stern, all-round etc.
- C(2).2 Identification of the vessels listed in point C(1).1 from lights they are required to display.
- C(2).3 What lights are required to be carried on a small power-driven vessel.

### Section D

#### Knowledge of the Compass, Variation, Deviation and the Deviation Card

- D.1 What gives a compass its directional property. Briefly identify the card, lubbers line, cardinal and inter-cardinal points and three figure notation.
- D.2 Understand variation and deviation. Danger and causes of unknown deviation.
- D.3 Purpose of a deviation card. Who compiles card. How often is this done.

### Section E

#### Chartwork and Navigation

- E.1 Using a nautical chart. Chart symbol identification. Lay off a safe course between two known positions. Convert this course to a compass course to steer using deviation card and variation off chart.
- E.2 Determine an E.T.A.
- E.3 Determine and dead reckoning position, given a speed and course.
- E.4 Give a position in latitude and longitude and by bearing and range from a charted point.

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- E.5 Fix vessel's position by means of compass cross-bearings.
- E.6 Identify a lighthouse from the characteristics shown on a navigation chart.
- E.7 South African Naval publications, List of Lights, Tide Tables, Sailing Directions and Notices to Mariners.

### 8. PRACTICAL EVALUATION

The candidate must perform the following actions during his/her practical evaluation:

Action	Criteria
Pre-launch procedures	<ul style="list-style-type: none"> <li>• weather check, trip and ETA logged, crew-briefing, vessel check.</li> </ul>
Launch craft	<ul style="list-style-type: none"> <li>• inspect launch site, operate craft safely out to sea.</li> </ul>
Anchor usage	<ul style="list-style-type: none"> <li>• let down, set and weigh anchor.</li> </ul>
Ropes and knots	<ul style="list-style-type: none"> <li>• make basic knots and explain uses.</li> </ul>
Routine checks	<ul style="list-style-type: none"> <li>• do routine checks such as weather condition, geographical position, fuel usage, and constant lookout.</li> </ul>
Safety	<ul style="list-style-type: none"> <li>• demonstrate correct manner of donning an approved lifejacket.</li> </ul>
Radio use	<ul style="list-style-type: none"> <li>• channel selection and voice procedures.</li> </ul>
Navigation	<ul style="list-style-type: none"> <li>• demonstrate compass steering, chart interpretation, position plotting on chart using landmarks and bearings (<i>only applicable for Categories A, B, C and D</i>).</li> </ul>
Outboard motors	<ul style="list-style-type: none"> <li>• show working knowledge on use, emergency repairs, maintenance.</li> </ul>
Loading and trim	<ul style="list-style-type: none"> <li>• ensure correct trim and proper stowage.</li> </ul>
Man overboard drill	<ul style="list-style-type: none"> <li>• demonstrate correct and safe method for retrieving crew member.</li> </ul>
Capsized craft	<ul style="list-style-type: none"> <li>• explain recovery procedures.</li> </ul>
Landing craft	<ul style="list-style-type: none"> <li>• Dock or land craft safely.</li> </ul>
After-use procedures	<ul style="list-style-type: none"> <li>• log trip, after-use maintenance, inspect craft, note fuel used.</li> </ul>

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