Skippers Academy Gauteng North

CAT: R - E SMALL VESSEL GUIDE TO CERTIFICATION OF COMPETENCY SKIPPERS ACADEMY GAUTENG NORTH

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ALPHABET, KNOTS.

FORWARD

South African maritime Safety Authority (SAMSA)

The primary legislation that governs shipping in South Africa is the Merchant Shipping act (57/1951) (MSA): Merchant-shipping (National Small Vessel Safety) regulations 2007. The act regulates matters affecting the administration of merchant shipping; certificates of competency; treatment of seaman; safety of ships and life at sea and inland waters; accident investigation; offences and penalties, amongst many other topics.

The South African Maritime Safety Authority (SAMSA) was formed in 1998 to administer various pieces of maritime legislation. The SAMSA Act governs the operations of the Authority whose objectives are:

- (a) To ensure safety of life and property at sea and inland;
- (b) To prevent and combat pollution of the marine environment by ships and private small vessels; and
- (c) To promote the Republic's maritime interests.

Small Vessel safety matters are regulated by the Merchant Shipping (National Small Vessel Safety Regulations), 2007 (NSVS regulations)

The NSVS regulations require skippers of the following categories of vessels to be certificated:

- 1. Commercial vessels
- 2. Pleasure vessels that are sailing vessels of nine meters or more in overall length
- 3. Power-driven pleasure vessels with propulsion power exceeding 15 horsepower.

The regulations require all skipper certificates of competency to be issued by a certifying authority. There are currently two certifying authorities, namely

SAMSA and South African Sailing. Certifying authorities must adhere to the regulations 16 of the NSVS regulations.

SAMSA has published its Small Vessel Policy in a Marine Notice. The current notice is dated MN13 of 2011 and will be updated when required. The Small Vessel Policy sets of the requirements of the national policy regarding the appointment of examiners; the types of certificates of competency offered and the levels of training required by the candidates.

It is important for examiners to be familiar with the legislative requirements that have relevance with the examination of candidates and the issue of certificates of competency.



Chapter 1

INLAND WATERS – CAT R

All vessels less than 9m traveling on inland waters fall under category R. These crafts are only allowed on water areas accessible to the public under sport and recreation and contained within Ports, Fishing harbors, Lagoons, Rivers, Dams, Wetlands and Lakes in the Republic of South Africa.

1NM OFFSHORE – CAT E

All vessels less than 9m travelling 1nm offshore and 15nm from a sheltered launch in daylight hours only fall under Cat E. These vessels are also allowed on all inland waters.

Cat E and R are not required to carry a compass or charts. Skippers of these vessels will therefore not be required to be competent in compass work and chart work. They will however be required to be proficient in interpreting information from navigational charts or maps in the area of their operation, and properly apply that information in order to plan and conduct a safe passage. In addition, they shall have knowledge of the various types of IALA (International association of lighthouse authorities) buoys that can be encountered on the South African coast, and the information that they provide in relation to navigate channels, dangers and special areas.

CERTIFICATE OF COMPETENCE:

Under the new regulations as from the 1st of March 2009,

All power driven vessels with an engine in excess of 15hp, and length ≤ 9m,

The skipper has to be certified.

This applies to all waters open to the public within the borders

Of South Africa,

CERTIFICATE OF COMPETENCE: (COC) Skippers license CATEGORY R

- ➤ Skipper of a power driven vessel limited to operating within a Port, Fishing harbor, Tidal River, Estuary and all inland water in South Africa.
- > For persons over the age of 16 years.
- Less than 16 must be under the supervision of a qualified skipper.
- COC means your Skippers ticket

CERTIFICATE OF COMPETENCE: CATOGARY E

- Skipper of a power driven vessel limited to operate 1nm Offshore And 15nm from a sheltered launch site.
- > Skipper must be over the age of 16 years or under the supervision of a skipper with skipper license.
- > Daylight hours only.

INSPECTION LIST TO QUALIFY FOR COF

Safety Survey Equipment Checklist for the certificate of fitness of a vessel

CAT R: Vessels operating in all PORTS, FISHING HARBOURS, TIDAL RIVERS, LAGOONS, ESTUARIES and ALL INLAND WATERS IN SOUTH AFRICA.

	ITEM	DESCRIPTION
Α.	Lifejackets/Personal flotation aids	Marked with vessels ID and SABS approved
В.	2 Oars or paddles	Only for Vessels with one Motor
C.	Code flag A (White and blue flag)	only required on dive boats
D. E.	Depth sounding device Fire Extinguisher/Firefighter serviced	Optional for Cat R one per engine 1.5kg SABS Approved
F. G.	Grab-line Capsize rope	Only on dive boats. Only on inflatables and Ski boats

H. long. ≥	Anchor with chain & 50m rope 6m 5mm chain 5m long.	Vessels ≤ 6m 3mm chain 3m		
l.	First aid Kit	Suitable for crew compliment		
J.	Repair Kit & Air pump	Only on inflatables		
K.	Spares and tools	To do minor breakdowns.		
L.	Exhaust pipes & silencers water-cooled	Inboards only		
M. skippe	Marking of equipment, Vessel & Trailer. Trailer marked with boat ID, ers name & tel.			
N. Navigation lights Cat R Operating at knight. Cat E – B vessels are required to have navigational lights.				
0.	Steering Gear & Emergency steering	All Market Street		
Р.	Kill Switches			
Q.	Towing line	10m in length		
R.	Bailing bucket			
S.	500mm Red flag Double Trouble	For water skiing only		
T.	Skippers license	Cat R - B		
U.	Buoyancy certificate	Valid for 5 years		
V.	Original expired COF	Except if new owner		
w.	External and Internal Hull condition			
Χ.	Trailer condition.			

Extra equipment checklist for Cat E vessels operating 1nm offshore and 15nm from sheltered launch site:

a. Projective flare set Unexpired

b. Hand-held smoke marker Unexpired

- c. 29MHZ radio No VHF for Cat E (D,C,B and A must have VHF radio with panic button as well as radio operators license)
- d. Drinking water 750mm drinking water per person
- e. Navigation lights
- f. Sea Anchor with hawser & tripping line



Life jackets and Personal floatation aids:

- 1. Must have whistle, attached with lanyard.
- 2. Marked with boat ID.
- 3. Reflector strips intact and not faded.
- 4. Straps all there.
- 5. No loose stitching.
- 6. Foam not compressed.
- 7. SABS 1417/1987 & SAMSA approved.
- 8. Not faded.
- 9. Keep in good and clean condition and out of sun. Store in cool dry place
- 10. One Flotation aid or lifejacket of appropriate size to be provided for each person on board.

Categories of Small Vessels:

- Cat R -----Vessel operating solely on inland waters. (Now defined as all water areas accessible to the public and contained within Ports and Fishing Harbors, tidal rivers, lagoons and all rivers, dams and lakes in South Africa.
- Cat E----- Vessels operating not more than 1nm offshore and 15nm miles from an approved launch site.
- Cat D-----Vessel operating less than 5nm from shore (Vessels with self-draining deck and one engine).
- Cat C-----Vessel with twin engines operating less than 15nm from shore.
- Cat B-----Vessels operating less than 40nm from shore.
- Cat A-----Vessel operating any distance from shore.

Buoyancy Certificates Cat R and E-B

- Cat R vessels operating on inland waters must have a minimum of 30% buoyancy fitted. Crew not calculated in working out buoyancy to be fitted.
- Cat E-B vessels operating offshore must have wet deck and a minimum off
 60% buoyancy fitted, Crew effect must be added in calculation of buoyancy to
 be fitted.

Capsize bottle:

• Cat E, D, C, B and A: Watertight bottle to store all flares, COF, COC and Buoyancy certificate and emergency items.

Must be secured on bow of vessels with capsize rope around bottle and secured to vessels with lanyard for easy access in event of capsizing.

Capsize rope to be long enough to secure to engine with knots in rope for easy holding on to rope.

Flag Types:

Red square flag 500mm x 500mm used when skiing.



• "A" flag. White and Blue used when picking up divers.



• "V" flag. White flag with red cross from corner to corner when in distress to get attention from other vessels.



Double Trouble

Emergency steering:

• All Vessels must be fitted with an emergency steering if there is no tiller arm to operate vessel when steering cable brakes.

Kill switch:

• There must be an operational kill switch for each motor on the Vessel attached to the skipper. (Not to be used when doing surf launch)

Fuel tanks:

- 1. Only approved steel, stainless steel or HDPF plastic tanks to be used. All fuel tanks must have some form off determining how much fuel is in the tank.
- 2. Fuel tanks must be adequately secured and of adequate capacity.
- 3. Tank must be fitted with adequate breathers.
- 4. Must be stowed outside of engine and battery compartment.
- 5. When refueling beware of static electricity.

Fire extinguisher:



- 1. Requirement is one 1.5kg dry powder per engine or fire striker.
- 2. SABS approved.
- 3. Serviced annually by an SABS authorized agent.
- 4. Installed close to skipper and engine.
- 5. It should be shaken and turned regularly so as to prevent the powder from setting hard in the container.
- 6. Fire striker extinguishers are also approved by SAMSA (They are 300mm long and about 50mm thick.)

Tools & Spares:

- 1. Adequate tools for the purpose of carrying out emergency repairs to machinery and essential equipment on board.
- 2. Tools like screwdriver set, set spanners, plug spanner, side-cutter and plier.
- 3. Adequate spares to do emergency repairs.
- 4. Spares like: Inline fuse and normal fuses, plugs, fuel filter, spare hull plug, rope to start engine in case of starter not working or discharged battery.

Chapter 2:

LEGAL REQUIREMENTS:

Before one proceed out to sea or on dams the Skipper of a vessel has to complete the LOG SHEET.

- > Voyage detail is the information that must be left with someone before one proceeds to sea or out on a dam.
- 1. The Vessel's ID. No and category, type and make.
- 2. The number of crew aboard, and their names.
- 3. The Vessel's ETD and ETA.
- 4. The intended place or places with expected times of arrival and departure.
- 5. Notify the person with whom the information was left of your return.
- 6. Also leave address and telephone number of next of kin or friend in case of emergency on the water to be contacted.
- a. All sport and recreational vessels must be inspected every twelve months and will be issued a certificate of fitness. (COF). This COF is valid for one year only if no structural or motor changes have been made on the vessel. If changes has been made a new COF must be issued. The COF can be issued by any SAMSA/Institution appointed surveyors.
- b. All commercial small vessels (Vessels carrying passengers at a fee) shall carry a Local General Safety Certificate. (LGSC) and is also valid for 12 months and must be surveyed annually. The LGSV can only be surveyed by a SAMSA officer.
- c. All vessels going to sea or on dams must be operated in accordance of the International Collision Regulation and in a responsible, safe and careful manner taking in consideration all other water users.
- d. All sea going vessels should be painted or pigmented in either red orange or yellow making the vessel visible in any offshore condition.

- Otherwise a length of material 2m x 2m capable of floating in a spread position should be carried aboard to be used in an emergency to make it visible from the air. Orange in color.
- e. No vessel < 3m may go to sea except in a designated area to be controlled by a regulating authority, and not more than 1000m off shore.
- f. Except in an emergency, neither the owner nor the skipper of a vessel may allow the number or mass of crew to exceed the number or mass indicated on the LGSC or COF. Crew on a vessel measured at 82.5kg per person. 6 crew x 82.5kg = 495kg.
- g. No skipper may operate a vessel if he/she is not physically able or of good mental health, or while under the influence of intoxicating liquor or drugs having a narcotic effect.
 - 1. Alcohol concentration not to exceed 0, 05 grams or more per 100ml for a specimen of blood.
 - 2. Or a breath specimen of 0,24ml or more per 1000ml
- h. No person < 16 years of age shall be allowed to be in control of a sport and recreational vessel if not accompanied and under the guidance of a skipper holding a valid skipper license.
- No person < 18 years of age shall be allowed to be in control of a commercial vessel

Numbering of vessels:

- 1. No Vessel may go on the water unless it has an approved number.
- 2. Only one approved number may be marked on the vessel. The number and category must be permanently marked on to each side of the vessel.
- 3. For Category R & E (Sport and recreation) this number must be at least 100mm high in contrasting colors to the boat.
- 4. For Category C B (offshore) this number must be 150mm High.
- 5. The ID number of a vessel is issued to the owner of a vessel, therefor the onus is on the registered owner to remove the number and install on his/her new vessels. The registered owner

- will remain responsible for the behavior of the vessel if number is not removed. Same if vessel is withdrawn from service.
- 6. All safety equipment on a vessel must be permanently marked with the vessels ID number
- 7. The Certificate of Fitness (COF) or Local General Safety Certificate (LGSC) is valid for 12months, providing no structural changes or bigger engine have been made to the vessel during the 12 month period.
- 8. The COF or LGSC, or a certified copy must be on board at all times. If this certificate is not renewed for a period of two years, the approved number will be invalidated.

A Certificate of Competence or a Certificate of Fitness can be cancelled for one of the following reasons.

- 1. The Certificate was obtained fraudulently.
- 2. The certificate was obtained dishonestly.
- 3. Skipper is found guilty of negligence or incompetence.

Any accident or incident caused on the water must be reported to the South African Police within 24 hours as well as any controlling authorities.

Where may a Skipper launch his/her vessel?

- 1. All Commercial harbors.
- 2. All Fishing harbors.
- 3. Designated launch sites.
- 4. Area's set out by Regulating Authority's.
- ➤ All registered vessels with outboard engines with no tiller arm must be equipped with an emergency steering to steer boat by, if steering cable brakes.
- > Conditions that prohibit a small craft from going on the water.
 - 1. Skipper without Certificate of Competence
 - 2. Vessel without Certificate of Fitness.

- 3. Inclement weather conditions.
- 4. Bad weather.
- 5. Debris floating on the water.
- 6. Heavy surf conditions.
- > Who is authorized to prohibit a vessel from going on the water?
 - 1. S.A.P. Water wing.
 - 2. SAMSA.
 - 3. Authorized Agent, and a safety officer authorized by the agent
 - 4. Club Safety Officer.
 - 5. Municipal Police

➤ Marine incident report:

Note that this applies equally to commercial and pleasure vessels and includes all vessels operating on declared inland waters. SAMSA request any vessel

- 1. Which has been lost, abandoned or stranded: or
- 2. Which has been seriously damaged or has caused serious damage to any other vessel: or
- 3. On which any casualty resulting in loss of life or serious injury to any person or an accident: or
- 4. Which has been in a position of great peril either from the action of some other vessel or for any other reason?

 To report the circumstances, within 24 hours to nearest SAMSA office and also to the SAP service.

Incident form can be obtained from SAMSA.

SAMSA offices:	Tel. no:	Fax no:
Cape Town	021 421 6170	021 419 0730
Saldanha Bay	022 714 1612	022 714 3653
Mossel Bay	044 690 4201	044 691 1206
Port Elizabeth	041 585 0051	041 582 1213
East London	043 722 4120	043 722 2264
Durban	031 307 1501	031 306 4983
Richards Bay	035 788 0068	035 788 0067
Pretoria	012 366 2600	012 366 2601

Who and when do you have to wear life jackets, personal buoyancy aids, or personal floatation aids?

- 1. All children under the age of 12 years.
- 2. All crew on boat that cannot swim.
- 3. When the Skipper gives the command to don life jackets.
- 4. In bad weather.
- 5. When surf launching or beaching.
- 6. All crew when boat is on the plane. (High speed)
- > The road trailer of a boat must be permanently marked with the following.
 - 1. The boats ID number issued to the owner.
 - 2. The owners name.
 - 3. The owners telephone number.
 - 4. Only needed on one side of the trailer.
 - 5. Do not put your address on the trailer.
- ➤ All vessels with an engine > 15hp, and less than 9m in length, may not get underway unless there is a kill –switch attached to the skipper of the vessel.
- ➤ The kill switch attached to the skipper does not apply to a vessel launching or beaching through the surf. If Skipper is in a man overboard situation the second in command should take over to safely take the vessel out of the surf zone.
- ➤ A Skipper of a vessel must take extreme caution at all times of the condition of the weather and of his crew and also of his fuel reserves.
- > No Skipper can operate as a commercial or charter dive boat unless he has an endorsement on his Skipper license to do so.
- ➤ What documents must you have on your vessel at all times?
 - 1. Your COC or certified copy thereof.
 - 2. Valid COF of your vessel or a certified copy.
 - 3. Valid Buoyancy certificate that did not expire, with photo of boat, and picture of how buoyancy was distributed, and expiring date.

Fuel you should carry on your vessel is the amount of petrol you are Going to use, plus at least 25% extra

CHAPTER 3

GENERAL BOATING AND SKIING:

Under which conditions will a vessel be prohibited from going on the water?

- 1. Vessel not water worthy. No COF or invalid COF.
- 2. No skipper with relevant license.
- 3. Bad weather conditions.
- 4. Debris which can be hazardous.
- 5. Heavy surf conditions.
- 6. Skipper under the influence of intoxicating liquor or drugs

Check lists:

Before traveling to a new venue.

It is very important to check your equipment and vessel at home before you depart on a boating trip. This will ensure that you have a pleasant trip and enjoy the outing. The following must be checked:

- 1. Get an up-to-date weather forecast of the venue.
- 2. Where applicable, tidal predictions.
- 3. Get information of the area like hospitals, doctors and emergency services.
- 4. Fueling station or facilities
- 5. Rules and regulations to the area. Make sure that you know if there are any no-go areas and where they are.
- 6. Is there a slipway
- 7. Any documents required like permits, etc. for the area.

8. A chart of the area.

Checklist on your trailer and boat at home before departure:

- 1. Check the trailer for any rust or cracks.
- 2. Trailer lights are working.
- 3. License disk not expired.
- 4. Wheel bearings greased and fit for trip.
- 5. Trailer tires in good condition as well as spare wheel.
- 6. Boat engine checked and serviced.
- 7. Battery fully charged.
- 8. Boat's hull, no cracks and hatches with lids in good condition.
- 9. Remember not to overload the boat trailer with camping gear.
- 10.Is your skipper's license, COF and buoyancy certificate on the boat?

Pre-Launch Checks

- 1. Check for cracks in the hull after your journey from home
- 2. Check fuel on board as well as 25% extra.
- 3. Check fuel tank and fuel line for any hazards.
- 4. See that petrol tank air screw is open.
- 5. Is your battery still charged and connected.
- 6. See that the motors are secured and start the motors, and only warm up once in the water.
- 7. All safety equipment on board.
- 8. Check controls, throttle and cables.
- 9. Check Propeller not damaged.
- 10. Check Steering and cable in working condition.
- 11. Check primer bulb in good condition and connections firmly connected and locked.
- 12.All equipment safely stored and hatches secured.
- 13.Brief crew on the intended cruise and discuss safety measurements.

 Choose a competent second in command to take over from you in an emergency. Make sure all other crew know what their duties on the vessel are.

- 14. Voyage details and signing out has been completed. (Log)
- 15.Look for clear passage and follow correct procedures

Before Launching your Vessel:

Park your vessel and boat in safe parking area before commencing with procedure. Not on the slipway while preparing to launch.

- 1. Remove tailboard.
- 2. Loosen boat aft tie downs from trailer, leave bow tie down in place.
- 3. Check that transom bung is in place and secure.
- 4. Place all equipment on board and store in hatches.
- 5. Secure a piece of rope called a painter to your vessel.
- 6. Once all this is done go to slipway and reverse your vessel down the slipway until vessel start floating. Loosen the bow tie down and use the painter tied to the bow to hold boat and not drifting away and also to tie to the Jetty.
- 7. Remove your vehicle from the slipway and park in allocated boat parking area.

RULES OF THE ROAD

Code of conduct for safe boating:

- 1. All boating should be done in an anti-clockwise direction.
- 2. All circuits should be marked in an anti-clockwise direction. All skippers using that circuit must follow the correct direction and procedures.
- 3. Respect the right of all other users of the recreational waterways, both on the water and on adjacent properties.
- 4. Make sure not to pollute the water or dispose of anything in the water. Similarly, do not pollute the shoreline.
- 5. Refueling shall only take place at least 50 meters from the shores edge.

- 6. No skipper shall operate, or permit any passenger or crew member to act in a reckless or negligent manner.
- 7. Keep clear of all anchored vessels, and do not come to close to any other vessel or craft.
- 8. Keep clear and respect the no wake zone where vessels launch or land. Even if not marked.
- 9. Operate carefully in a no wake zone and be aware of fisherman, swimmers, canoers and vessels moored on the water's edge.
- 10. Observe wildlife areas and do not disturb any wildlife or vegetation.
- 11. No person shall operate a vessel while under the influence of alcohol or any other intoxicating drugs.

Safe speed:

Safe speed is determined by various factors. When these factors have been observed, effective and evasive actions should be taken.

- 1. Your experience of boating.
- 2. The maneuverability, stopping and turning distance of your vessel with regard to all other vessels in the area.
- 3. Weather conditions.
- 4. Water conditions including the depth of the water and wind speed.
- 5. Amount of traffic on the water.

Lookout:

- 1. Perfect lookout is to be able to have 360° vision of what is happening around you.
- 2. Use all available means, by sight and by hearing to ensure a clear passage.
- 3. Instruct your crew and position them to have a 360° clear as possible passage without the risk of a collision.

Risk of collision:

Skipper of a vessel must use every available means to ascertain whether the risk of collision exists, and if it is deemed to exist. Every action must be taken to prevent the collision, even if the skipper has to give way to prevent it. This does not exonerate the other vessel from any liability.

Stand on vessels:

This vessel has the right of way and shall keep her course and speed.

Give way vessel:

This vessel shall, as far as possible take early action to keep well clear. Even by going astern, alter course, or by stopping.

Narrow rivers or channels:

Keep to the starboard side of the channel, (anti clockwise) as far as possible, take early and substantial action to keep well clear of oncoming vessels. Pass each other on Port side.

Overtaking:

Vessel B is the stand on vessel and must keep her course and speed.

Vessel A is the give way vessel and can pass on either side, as long as it is safe.