Studybook for the SCV code Boatmaster grade 3 on the Islands Bonaire, St Eustatius and Saba

St Eustatius, 16-03-2026, Version 8.0

Compilers:
Netherlands Shipping Inspectorate – Caribbean Netherlands
Marniks Rink
Luc van Osch

This document has been reviewed by the STCW training department of the Netherlands Maritime Authority, Human Environment and Transport Inspectorate taking into account the Boatmaster grade 3 syllabus of the SCV Code 2021.

The content is in line with the theoretical required competences of the Boatmaster grade 3 training.

Signed: K. Heidergott

Stamped:

More information about this publication can be obtained at:

Netherlands Shipping Inspectorate – Caribbean Netherlands
Gallowsbay, Lower Town, St Eustatius
NSICN@rijksdienstcn.com

Acknowledgements:

In Chapter B-2 Regulations for preventing collision at sea. The images used are from the book "Zee-aanvaringsreglement" from P.S. Agema

While every effort has been made to ensure the reliability of the information presented in this publication, the Netherlands Shipping Inspectorate – Caribbean Netherlands neither guarantees the accuaracy of the data contained herein nor accepts responsibility for errors or ommisions or their consequences.

Table of Content

Numbering derived from the SCV Boatmaster 3 Syllabus SCV Code 2021.
Syllabus objectives B5,6, 14, 15 and 16 are not for Boatmaster 3 exam.

Boatmaster grade 3 legal requirements

How to obtain a Boatmaster 3 license for an Annex 6 vessel.
The following items must have been succesfully completed:

1) Practical test
2) Oral examination
3) VHF Certificate examination
4) Medical First Aid certifcate
5) Statement of medical fitness
6) Be eighteen years of age or over

To apply for the BM 3 boating license, you must send the following certificates: The BM3 certificate, The VHF certificate, first aid certificate, and the medical statement.

With the BM3 course you can obtain your BM3 certificate. To obtain your VHF certificate and your first aid certificate you will have to follow a separate course.

To obtain the VHF certificate you need to follow a course from a recognized training institute; e.g. RDI Caribbean Netherlands

With regard to the medical first aid certificate, the certificates of the Red Cross and the World Recreational Scuba Training Council (WRSTC) or similar are accepted.

Once you have the necessary documents, you can download the application form and the form for the "medical statement" on the "shipping inspection Caribbean Netherlands" web page.

With the "medical statement" form you go to your doctor, who physically checks you and fills out the form.

Now you can apply for the BM3 license by sending all the documents including a picture of your I.D. (passport, or sedula) and a scan of a resent passport picture to; boatmasterCaribNL@ilent.nl

The practical test,

This test should take place on a vessel of a type for which the applicant is requiring a licence

Boat handling:

1. Berthing and un-berthing
2. Coming to and weighing anchor
3. Making fast to and leaving a buoy
4. Boat manoeuvring in confined waters
5. Turning short round

6. Knowledge and effect of transverse thrust
7. Steering a compass course and taking a rough bearing
8. Practical demonstration on the use of VHF on board the applicant's vessel. The holder must have knowledge of procedures used in radio telephone (VHF and MF) communications particularly with respect to distress, urgency, safety and navigational messages and of the adverse effect of misuse of such equipment

The oral or written examination

The objectives are:

9. Emergency situations
10. Regulations for preventing collision at sea
11. Local knowledge and regulation
12. Seamanship
13. Distress signals
14. Passenger safety
15. Legal responsibilities towards passengers and seafarers
16. Weather
17. Engineering knowledge
18. Prevention of pollution
19. Basic knowledge of vessel construction and stability
20. First aid

VHF Certificate

The exams are held under the supervision of the Rijksinspectie Digitale Infrastructuur (RDI) website: Rijksinspectie Digitale Infrastructuur (RDI) | Rijksdienst Caribisch Nederland It is possible to translate the information into English, or papiamentu as well, by changing the language with the buttons on the bottom of the page.

Medical First Aid certificate

With regard to this medical first aid certificate, the certificates of the Red Cross and the World Recreational Scuba Training Council (WRSTC) or similar are accepted.

The statement of medical fitness

See appendix 1 of this booklet

Voor Bonaire, Sint Eustatius en Saba

Agentschap Telecom
Kaya Grandi 69
PO Box 791
Kralendijk, Bonaire
Caribisch Nederland
Telefoon: (+599) 717 3140
Fax: (+599) 717 3554
Email: bes@agentschaptelecom.nl
Website:
www.agentschaptelecom.nl

Voor Curaçao

Bureau Telecommunicatie en Post
Beatrixlaan 9, Emmastad
PO box 2047
Curaçao
Tel: +599 9 463 1700
Fax: +599 9 736 5265
Email: gen.affairs@burtel.cw
Website: www.btnp.org

Voor St Maarten

Bureau Telecommunications and
Post St. Maarten
Kannegieter street 15, Unit 5.1
PO Box 5054, Philipsburg
St. Maarten
Tel: +1 721 542 5557
Fax: +1 721 542 4817
Email: info@sxmregulator.com
Website: www.sxmregulator.com

Voor Aruba

Directie Telecommunicatiezaken
Rumbastraat 19
Oranjestad
Aruba
Tel: +297 582 6069
Fax: +297 582 5307
Email: dirtelza@setarnet.aw
Website: www.dtz.aw

B1 Emergency situations

Man Overboard Recovery Procedure

Although we should keep in mind that every situation is different, man overboard procedures are often broken down into the following areas:

1. Initial Reaction on Board
2. Approaching and Recovering the Victim

1. Initial Reaction on Board

The first priority is to provide the victim with additional floatation to increase his or her odds of surviving until the boat returns. Be sure to also "litter the water" with any other floating paraphernalia that will increase visibility of the location, making it easier to find the victim.

The person who first sees the victim in the water must raise alarm and maintain a laser-like focus on his or her location in the water and continually point out that position to the helmsperson.

Other high priority steps include:

Save a GPS location (if onboard) to facilitate returning to the scene.

a. Call for help. Any man overboard situation can be life threatening, so there is cause for issuing a "Mayday," or at the very least, "Pan Pan" on the VHF to get nearby boats to your team.
b. Position the crew to turn the boat around. Ideally, this will follow the procedures that you have determined are ideal for your boat in the current conditions and that you have practiced with your crew.

2. Approaching and Recovering the Victim

The priorities in this stage of the procedure are:

Find the victim.
This can be extremely difficult especially in the dark hours. So, that call you made on the VHF to rally immediate support from nearby boats can be a life-saving step in certain situations.

Approach carefully and at a controllable speed.
Preferable against the current and wind.

Make contact with the victim.

It means making a connection, most likely by rope and possibly by a Lifesling or other lifting/floatation device.

Retrieve the victim and get him or her safely on board. There are a number of potential methods that vary in their efficacy depending on the boat, conditions, crew size and strength, condition of the victim, and equipment available.

Apply appropriate care for possible near drowning, hypothermia, or any other injuries.

Loss of engines and / or steering

Raise alarm, inform the harbour and surrounding vessels and ask for assistance, if necessary and possible use the anchor or sea anchor.

Action to take in event of collision or grounding

Raise alarm, inform the harbour and surrounding vessels and ask for assistance. In case of collision keep if possible both vessels connected to avoid rapid flooding through the collision. Assess the damage and danger and decide to abandon or remain on board. In case of abandoning, make sure all crew and passenger wear their lifejackets correctly and ignite the life jacket light in disembarking during the dark hours.

Use of extinguishing appliances

Fire extinguisher use

It is important to know the locations and the types of extinguishers in your workplace prior to actually using one.

Fire Extinguishers can be heavy, so it's a good idea to practice picking up and holding an extinguisher to get an idea of the weight and feel.

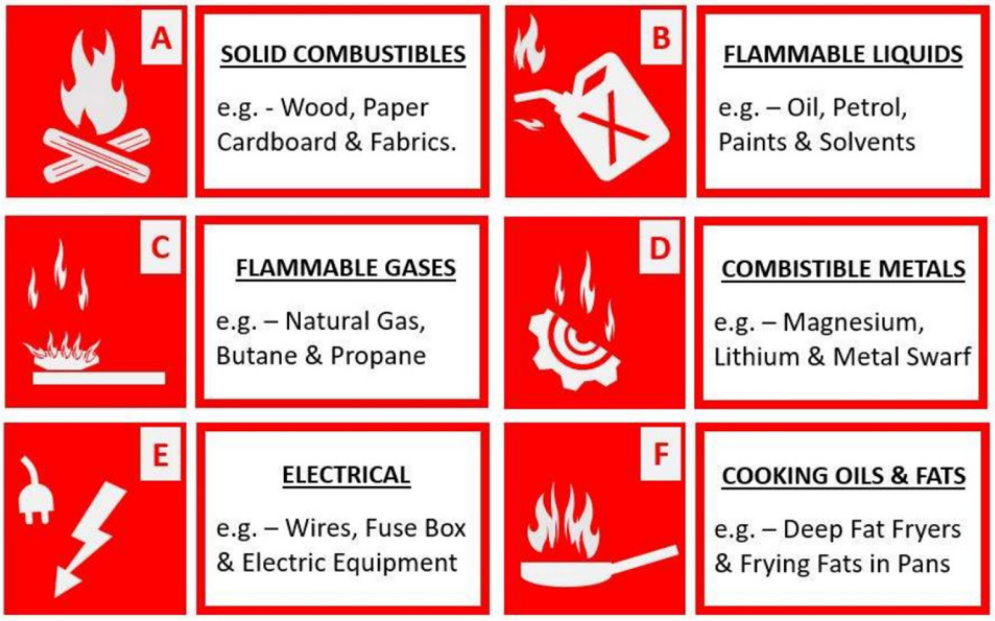
Take time to read the operating instructions and warnings found on the fire extinguisher label. Not all fire extinguishers look alike.

Practice releasing the discharge hose or horn and aiming it at the base of an imaginary fire. Do not pull the pin or squeeze the lever. This will break the extinguisher seal and cause it to lose pressure.

Type of fires

Not all fires are the same. Different fuels create different fires and require different types of fire extinguisher agents.

Fire Classification



Types of extinguishers

	A	B	C	D		F
	Wood, paper, plastics, soft furnishings etc.	Flammable liquids, petrol, oil etc.	Flammable gases, propane, butane, methane etc.	Metals; aluminium, magnesium, titanium, swarf etc.	Electrical apparatus, computers, phone chargers etc.	Cooking oils & fats
AFF FOAM	✓	✓				
WATER	✓					
WET CHEMICAL	✓					✓
CO2		✓			✓	
DRY POWDER	✓	✓	✓		✓	

Foam extinguishers

Foam fire extinguishers can be used on Class A and B fires. They are most suited to extinguishing liquid fires such as petrol or diesel and are more versatile than water jet extinguishers because they can also be used on solids such as wood and paper. The foam extinguishes liquid fires by sealing the surface of the liquid, preventing flammable vapour reaching the air and starving the fire of fuel. They are not suitable for use on free flowing liquid fires.

Water extinguishers

Water extinguishers are one of the most cost-effective ways to fight Class A fires, those fuelled by solid materials such as paper, wood and textiles.

Wet chemical extinguishers

Wet chemical extinguishers are suitable for use on Class F fires involving cooking oils and fats, such as lard, olive oil, sunflower oil, maize oil and butter. They are extremely effective, when used correctly. The wet chemical rapidly knocks the flames out, cools the burning oil and chemically reacts to form a soap-like solution, sealing the surface and preventing re-ignition.

Although they are primarily designed for use on Class F fires, cooking oils and deep fat fryers. They can also be used on Class A fires (wood, paper and fabrics)

Carbon dioxide extinguishers (CO2)

CO2 extinguishers are ideal for places with a lot of electrical equipment because they are safe to use on fires involving electrical apparatus. Carbon dioxide extinguishers do not leave any residue, unlike a foam extinguisher. They can also be used on Class B fires, those involving flammable liquids such paraffin or petrol. CO2 extinguishers work by smothering the fire and cutting off the supply of air.

Powder extinguishers

Powder extinguishers are a good multi-purpose fire extinguisher because they can be used on Class A, B and C fires. They can also be used on fires involving electrical equipment however, they do not cool the fire so it can re-ignite. Powder extinguishers can also create a loss of visibility and may create breathing problems. They are not generally recommended for use inside buildings unless there is absolutely no alternative.

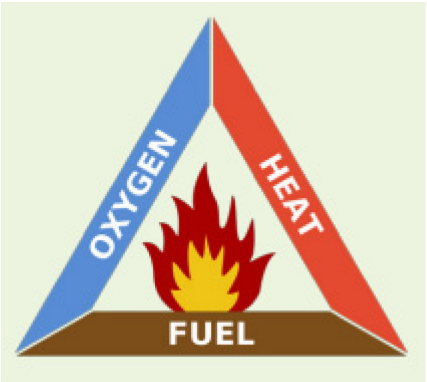
Fire blankets

Fire blankets are primarily for use on hot oil fires such as frying pans or small deep fat fryers. They can also be used on someone whose clothing has caught fire. They work by smothering the fire, stopping access to the oxygen fuelling it and extinguishing it.

Fire Triangle

What is? FIRE TRIANGLE
The Fire Triangle is a simple way of understanding the components of fire.

Each side of the triangle represents one of three components needed to have a fire – oxygen, fuel and heat.



Fire is a chemical reaction and without one of these components, fire cannot exist or be sustained.

The air that surrounds us contains approximately 21% oxygen. Air supporting a fire must be at least 16% oxygen content to burn.

Fuel is considered any material capable of burning.

A heat source is responsible for the initial ignition of fire, and heat is also needed to maintain the fire and permit it to spread.

A fire occurs when all three of these components react together in time and space. A fire can be put out, prevented or the impacts reduced by removing, reducing or separating these elements.

Examples given:
A fire blanket takes away the oxygen and fighting a fire with water takes away the heat.

The rules for fighting fires

Activate
Inform the harbour and surrounding vessels.

Assist
Any persons in immediate danger, or those incapable on there own, to exit the area, without risk to yourself.

Only after these two are completed, should you **Attempt** to extinguish the fire.

The time to use a fire extinguisher is in the early, or starting, stage of a fire. Once the fire starts to grow or spread, it is best to evacuate the vessel, closing doors, dampers and windows behind you.

If the fire is producing large amounts of thick, black smoke or chemical smoke, it may be best not to try to extinguish the fire. Neither should you attempt to extinguish the fire in a confined space. Outdoors, approach the fire with the wind at your back.

Remember that all fires will product carbon monoxide and many fires will produce toxic gasses that can be fatal to human life, even in small amounts.

You should always fight a fire with an exit or other means of escape at your back. If the fire is not quickly extinguished, you need to be able to get out quickly and avoid becoming trapped.

When it is time to use the extinguisher on a fire, Just remember to P.A.S.S.!

Pull	→	Pull the pin
Aim	→	Aim the nozzle or hose at the base of the fire from the recommended safe distance.
Squeeze	→	Squeeze the operating lever to discharge the fire extinguisher agent.

Sweep → Sweep the nozzle or hose from side to side until the fire is out. Move forward or around the fire area as the fire diminishes. Watch the area in case of re-ignition.

1. Pull

Pull the pin.

2. Aim

Aim the nozzle or hose at the base of the fire from the recommended safe distance.

3. Squeeze

Squeeze the operating lever to discharge the fire extinguisher agent.

4. Sweep

Starting at the recommended distance, Sweep the nozzle or hose from side to side until the fire is out. Move forward or around the fire area as the fire diminishes. Watch the area in case of re-ignition.

Use of lifesaving appliances

Lifesaving appliances (LSA's) are mandatory safety equipment required by the SCV Code to protect passengers and crew during maritime emergencies.

Key equipment for SCV vessels includes liferafts, lifejackets, buoyant apparatus, lifebuoy, radar reflectors and pyrotechnics.

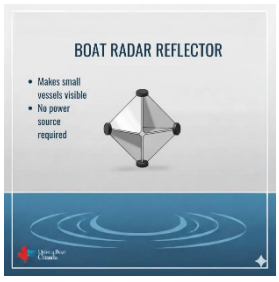
These devices must be regularly inspected, easily accessible, and maintained in accordance with the International Life-Saving Appliance (LSA)''

Buoyant apparatus commonly used on SCV vessels needs to be able to accommodate the total number of persons on board.
Each buoyant apparatus shall be fitted with a lifeline, pendants, a painter and a light.

Lifejackets come in four sizes infant, child, adult and oversized.
For how to don a lifejacket see Chapter B8 Passenger safety

Lifebuoys need to carry the ships name and homeport. The required amount of lifebuoy depends on the length of the ship. For vessels operating between the hours of sunset and sunrise, a self-igniting lifebuoy light shall be attached to one of the buoys.
At least one of the ring life buoys required by shall be fitted with a lifeline.

Distress pyrotechnics shall be stowed in a portable watertight container carried at the operating station.
Each distress signal shall be clearly marked with the date of manufacture and the date of expiry.
See also Chapter B7 Distress signals



All vessels shall be provided with an efficient radar reflector.
These reflectors make small vessels better visible on radar, and no power source required

B2: Regulations for preventing collision at sea

Collision Regulations 2017 Consolidated edtion

Rule 1
Application

(a) These Rules shall apply to all vessels upon the high seas and in all waters connected therewith navigable by seagoing vessels.

(b) Nothing in these Rules shall interfere with the operation of special rules made by an appropriate authority for roadsteads, harbours, rivers, lakes or inland waterways connected with the high seas and navigable by seagoing vessels. Such special rules shall conform as closely as possible to these Rules

Rule 2
Responsibility

(a) Nothing in these Rules shall exonerate any vessel, or the owner, master or crew thereof, from the consequences of any neglect to comply with these Rules or of the neglect of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case.

(b) In construing and complying with these Rules due regard shall be had to all dangers of navigation and collision and to any special circumstances, including the limitations of the vessels involved, which may make a departure from these Rules necessary to avoid immediate danger.

Rule 3
General Definitions

For the purpose of these Rules, except where the context otherwise requires:

(a) The word 'vessel’ includes every description of water craft.

(b) The term 'power-driven vessel' means any vessel propelled by machinery.

(c) The term 'sailing vessel' means any vessel under sail provided that propelling machinery, if fitted, is not being used.

(d) The term 'vessel engaged in fishing' means any vessel fishing with nets, lines, trawls or other fishing apparatus which restrict maneuverability, but does not include a vessel fishing with trolling lines or other fishing apparatus which do not restrict maneuverability.

(e) The word 'seaplane' includes any aircraft designed to maneuver on the water.

(f) The term 'vessel not under command' means a vessel which through some exceptional circumstance is unable to maneuver as required by these Rules and is therefore unable to keep out of the way of another vessel.

(g) The term 'vessel restricted in her ability to maneuver means a vessel which from the nature of her work is restricted in her ability to maneuver as required by these Rules and therefore is unable to keep out of the way of another vessel.

The term 'vessels restricted in their ability to maneuver shall include but not be limited to;

(i) a vessel engaged in laying, servicing or picking up a navigation mark, submarine cable or pipeline;

(ii) a vessel engaged in dredging, surveying or underwater operations;

(iii) a vessel engaged in replenishment or transferring persons, provisions or cargo while underway;

(iv) a vessel engaged in the launching or recovery of aircraft;

(v) a vessel engaged in mine clearance operations;

(vi) a vessel engaged in a towing operation such as severely restricts the towing vessel and her tow in their ability to deviate from their course.

(h) The term 'vessel constrained by her draught' means a power-driven vessel which because of her draught in relation to the available depth and width of navigable water, is severely restricted in her ability to deviate from the course she is following.

(i) The word 'underway' means that a vessel is not at anchor, or made fast to the shore, or aground.

(j) The words 'length' and 'breadth' of a vessel mean her length overall and greatest breadth.

(k) Vessels shall be deemed to be in sight of one another only when one can be observed visually from the other.

(l) The term 'restricted visibility' means any condition in which visibility is restricted by fog, mist, falling snow, heavy rainstorms, sandstorms or any other similar causes.

Rule 5
Look-out

Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

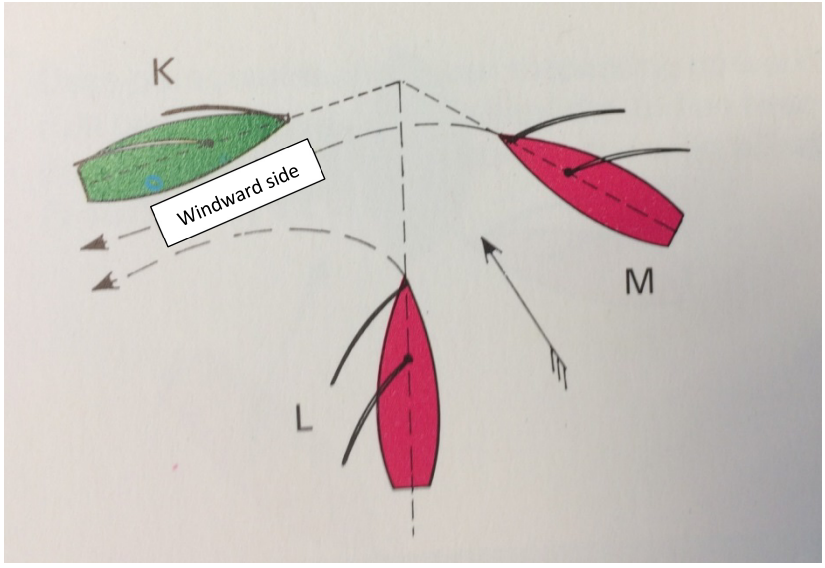
Rule 6
Safe Speed

Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

Rule 7
Risk of Collision

(a) Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. If there is any doubt such risk shall be deemed to exist.

Rule 12
Sailing Vessels

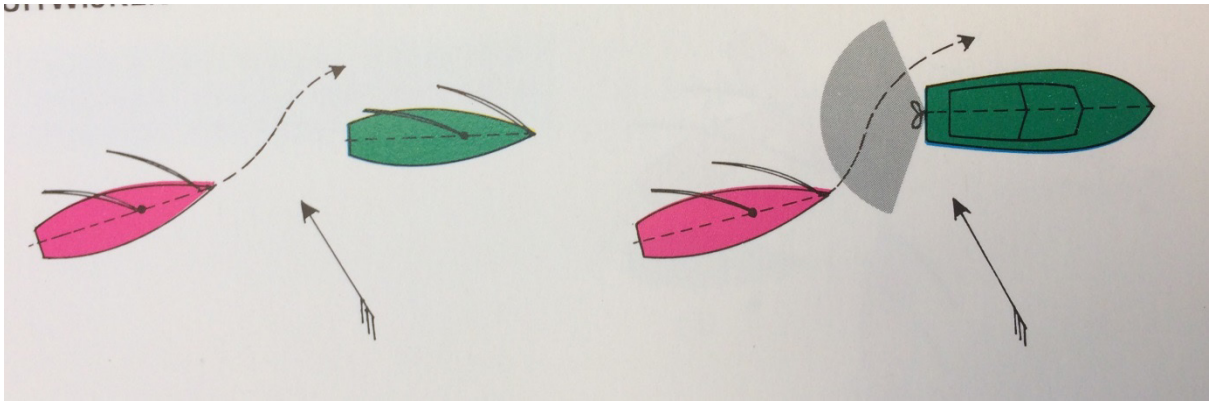


K versus M: red vessel M gives way because carrying the sail over starboard

K versus L: both carrying sail over port but red vessel L gives way because she is the windward vessel

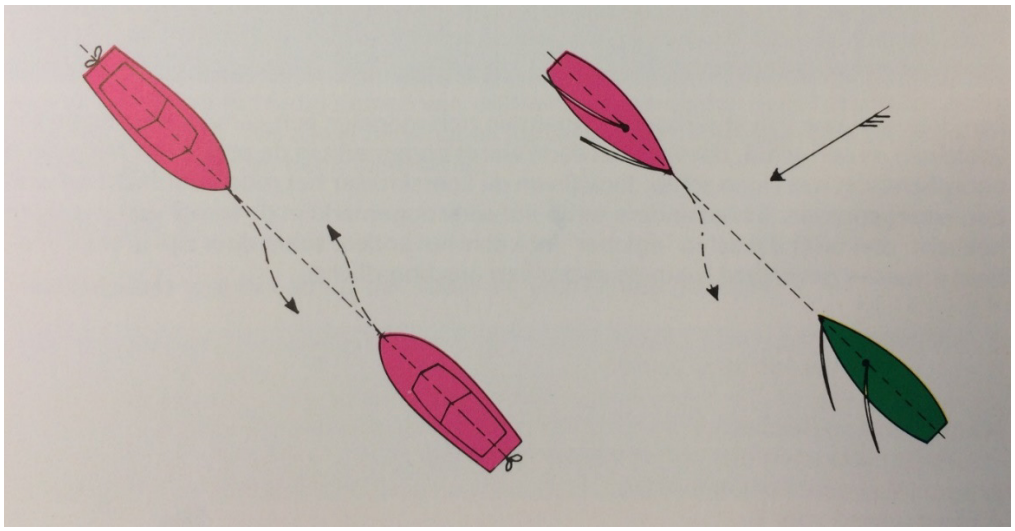
Rule 13
Overtaking

Any vessel overtaking any other shall keep out of the way of the vessel being overtaken.



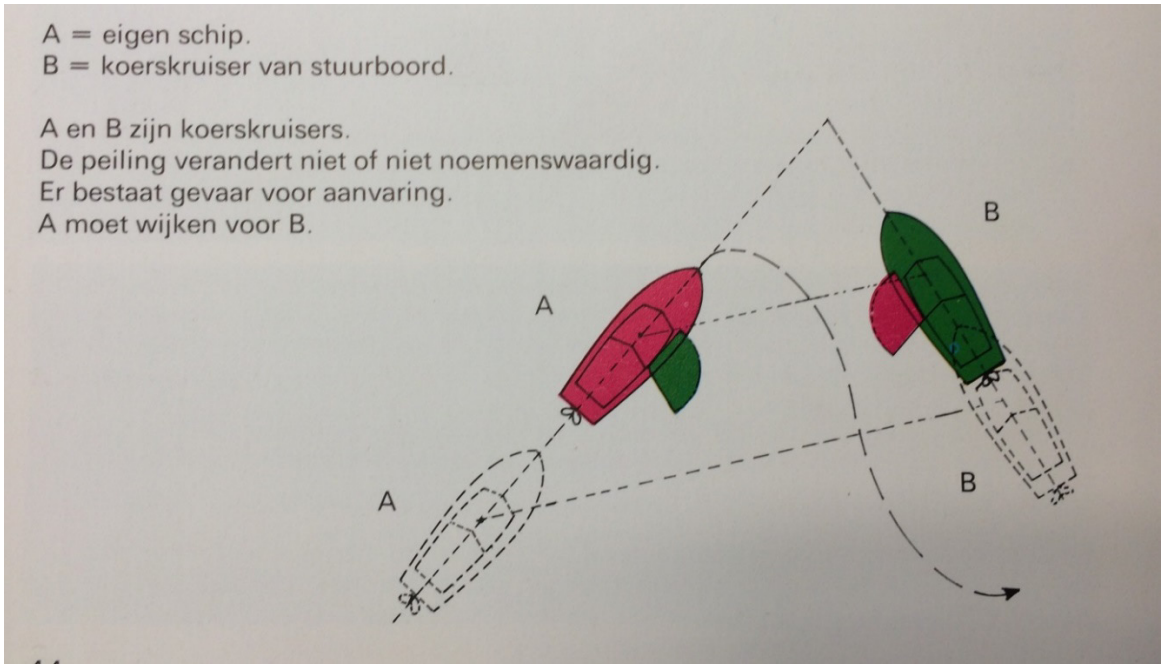
Rule 14
Head-on Situation

Each shall alter her course to starboard so that each shall pass on the port side of the other.



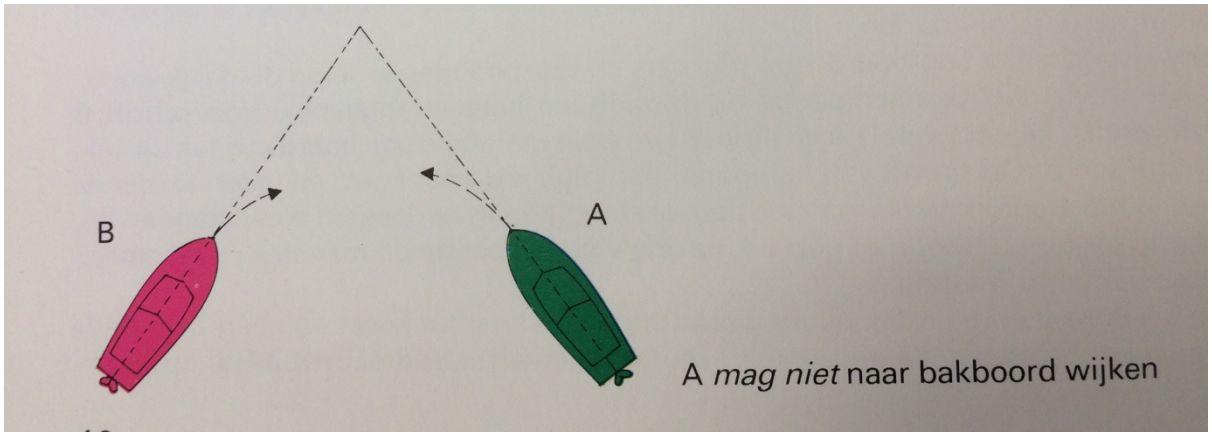
Rule 15
Crossing Situation

The vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel.



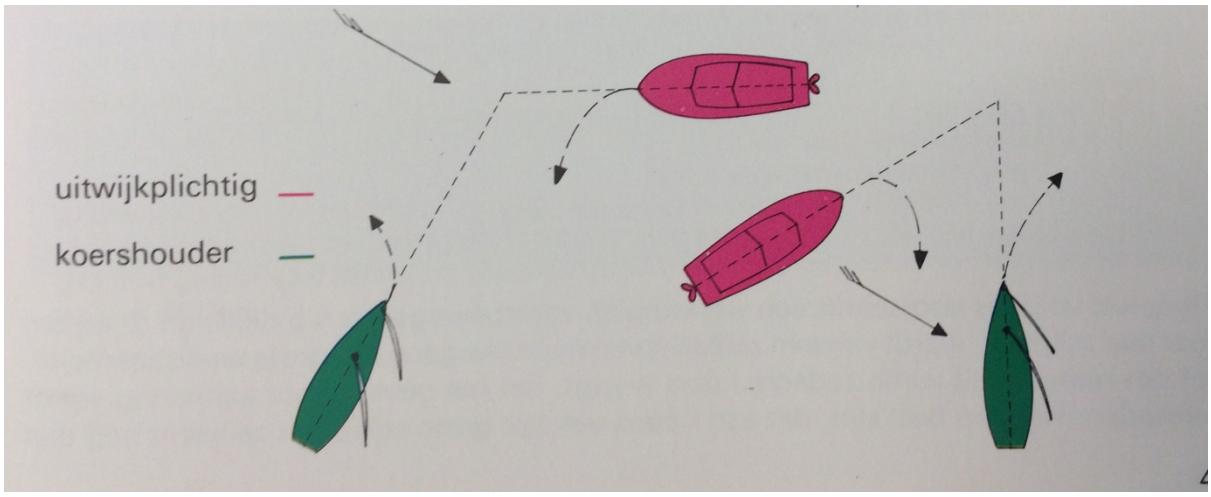
Rule 17
Action by Stand-on Vessel

The stand on vessel shall keep her course and speed.



The stand on vessel may however take action, do not alter course to portside, to avoid collision as soon as it becomes if the other vessel is not taken appropriate action.

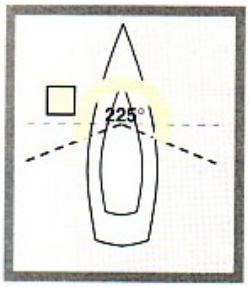
Rule 18
Responsibilities between Vessels



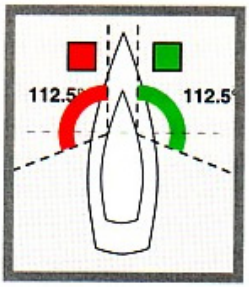
The power-driven vessel gives way to a sailing vessel

Rule 21
Definitions

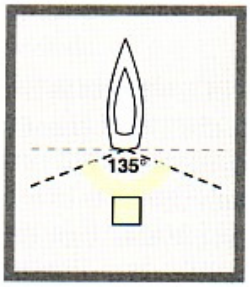
Mast head light | Side lights | Stern light | All round light



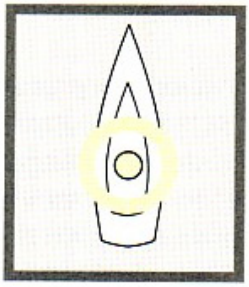
figuur 3
TOPLICHT



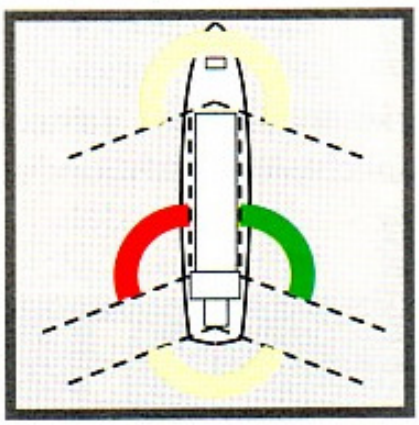
figuur 4
BOORDLICHTEN



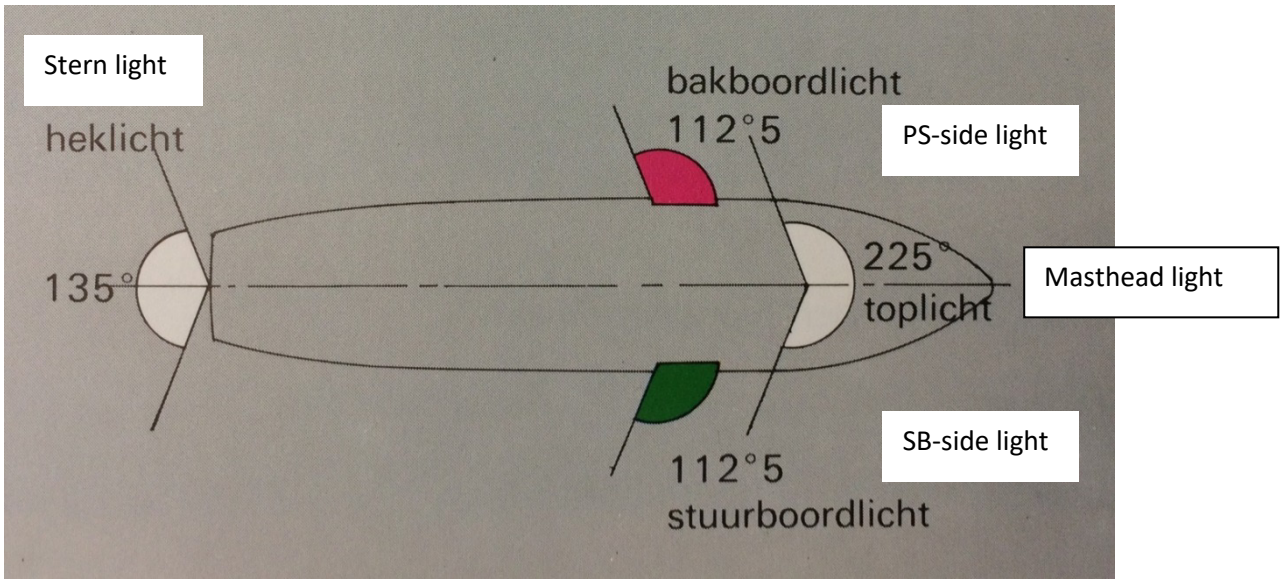
figuur 5
HEKLICHT



figuur 6
RONDOM



Rule 23
Power-driven Vessels underway



A power-driven vessel underway shall exhibit:

(i) a masthead light forward;

(ii) a second masthead if L>50 m;

(iii) sidelights;

(iv) a stern light.

A power-driven vessel L < 12 meters:

(i) an all-round light;

(ii) sidelights.

A power-driven vessel L < 7 meters:

(i) an all-round light.

Rule 24
Towing

(a) A power-driven vessel when towing shall exhibit:

(i) two masthead lights in a vertical line;

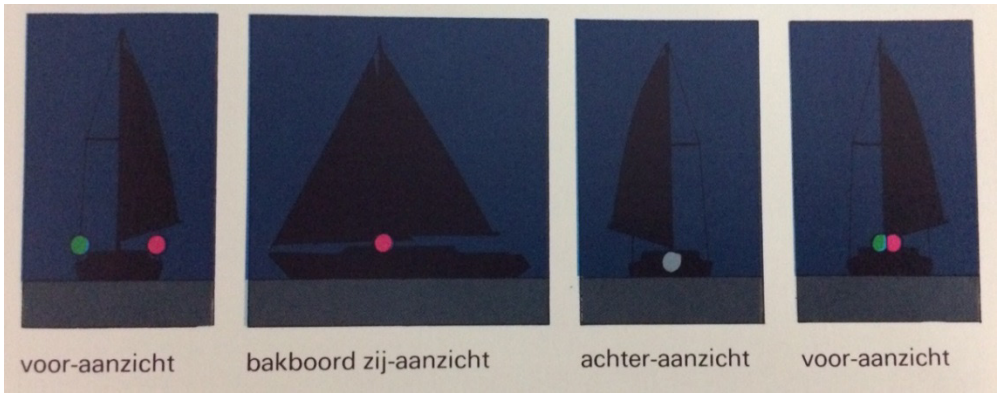
(ii) three masthead light if tow L > 200 m;

(iii) sidelights;

(iv) a sternlight;

(v) a towing light (yellow) in a vertical line above the stern light.

Rule 25
Sailing Vessels underway

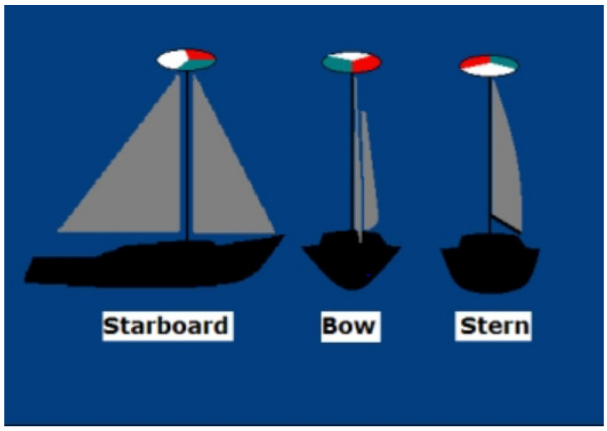


(a) A sailing vessel underway shall exhibit:

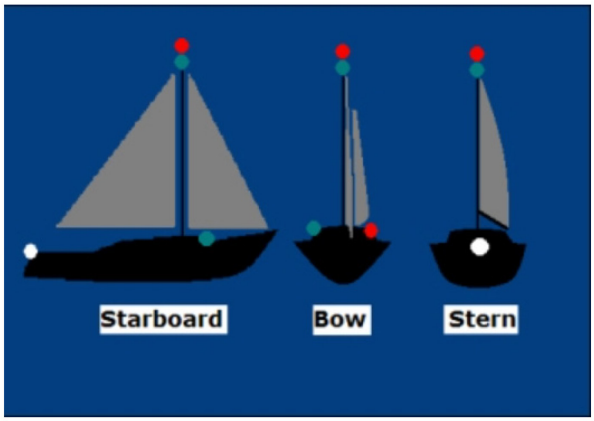
(i) sidelights;

(ii) a sternlight

(b) In a sailing vessel of less than 20 metres in length the lights prescribed in paragraph (a) of this Rule may be combined in one lantern carried at or near the top of the mast where it can best be seen.

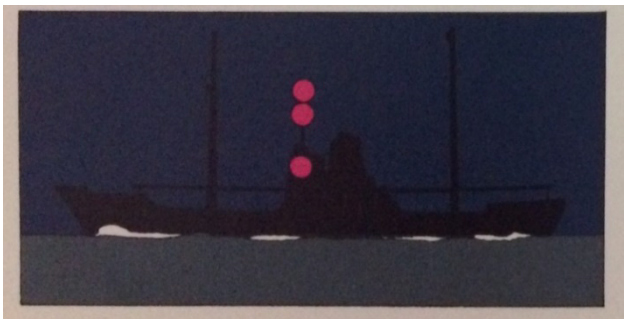


(c) A sailing vessel underway may, in addition to the lights prescribed in paragraph (a) of this Rule, exhibit at or near the top of the mast, where they can best be seen, two all-round lights in a vertical line, the upper being red and the lower green, but these lights shall not be exhibited in conjunction with the combined lantern permitted by paragraph (b) of this Rule.



Rule 27
Vessels not under Command or Restricted in their Ability to Manoeuvre

(a) A vessel **not under command** shall exhibit:

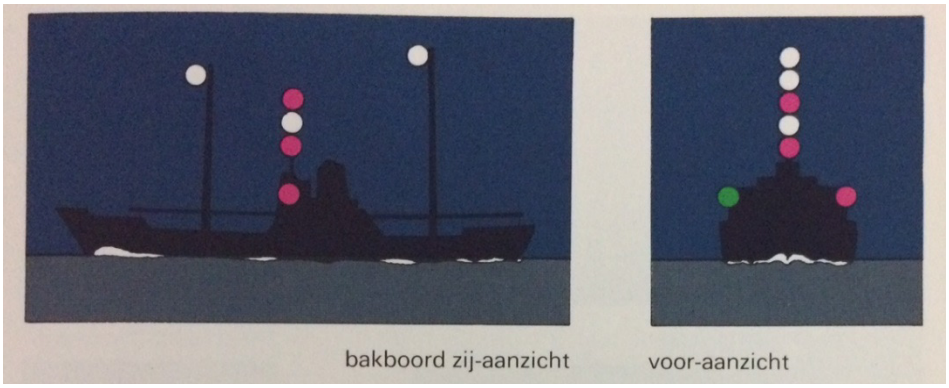


(i) two all-round red lights in a vertical line where they can best be seen;

(ii) two balls or similar shapes in a vertical line where they can best be seen;

(iii) when making way through the water, in addition to the lights prescribed in this paragraph, sidelights and a sternlight.

(b) A vessel **restricted in her ability to manoeuvre**, except a vessel engaged in mine clearance operations, shall exhibit:

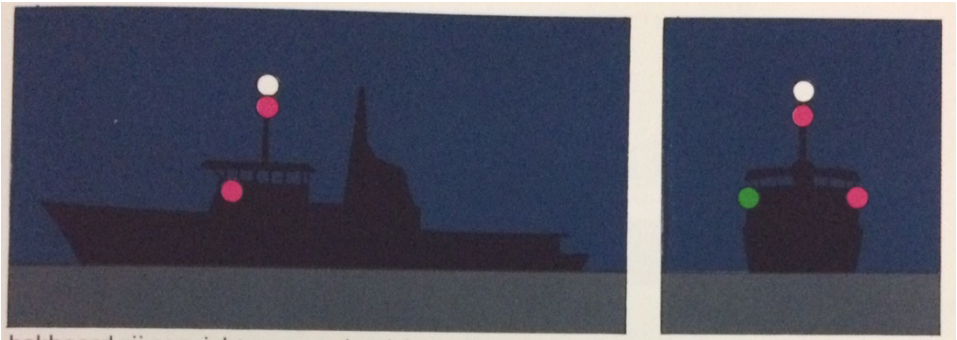


(i) three all-round lights in a vertical line where they can best be seen. The highest and lowest of these lights shall be red and the middle light shall be white;

(ii) three shapes in a vertical line where they can best be seen. The highest and lowest of these shapes shall be balls and the middle one a diamond;

(iii) when making way through the water, a masthead light or lights, sidelights and a sternlight in addition to the lights prescribed in subparagraph (i);

Rule 29
Pilot Vessels



bakboord zij-aanzicht van een loodsboot die varende is

voor-aanzicht

(a) A vessel engaged on pilotage duty shall exhibit:

(i) at or near the masthead, two all-round lights in a vertical line, the upper being white and the lower red;

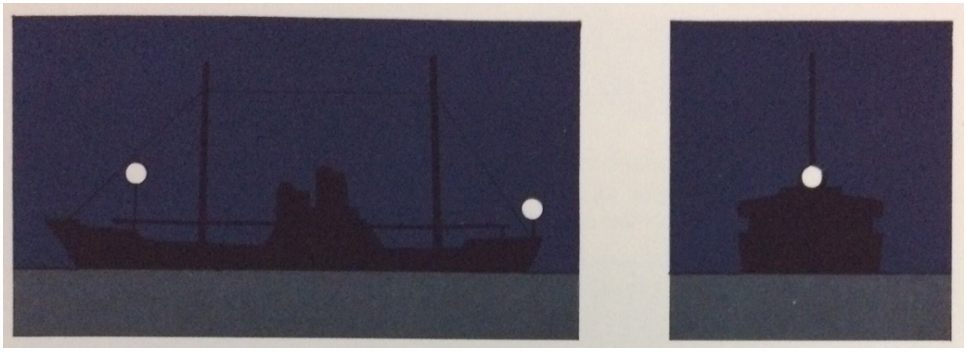
(ii) when underway, in addition, sidelight and a stern light;

(iii) when at anchor, in addition to the lights prescribed in subparagraph (i), the light, lights or shape prescribed in Rule 30 for vessels at anchor.

(b) A pilot vessel when not engaged on pilotage duty shall exhibit the lights or shapes prescribed for a similar vessel of her length.

Rule 30
Anchored Vessels and Vessels aground

(a) A vessel **at anchor** shall exhibit where it can best be seen:



(i) in the fore part, an all-round white light or one ball;

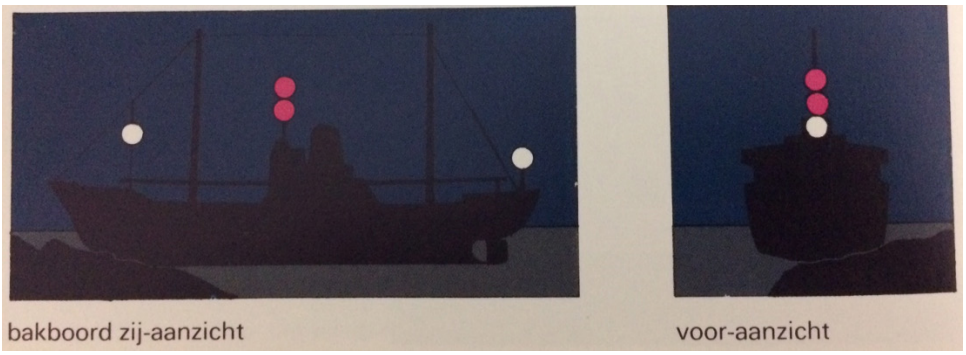
(ii) at or near the stern and at a lower level than the light prescribed in sub-paragraph;

(i), an all-round white light.

(b) A vessel of less than 50 metres in length may exhibit an all-round white light where it can best be seen instead of the lights prescribed in paragraph (a) of this Rule.

(c) A vessel **at anchor** may, and a vessel of 100 metres and more in length shall, also use the available working or equivalent lights to illuminate her decks.

(d) A vessel **aground** shall exhibit the anchor lights in addition, where they can best be seen:



(i) two all-round red lights in a vertical line;

(ii) three balls in a vertical line.

Rule 34
Maneuvering and Warning Signals

(a) When vessels are in sight of one another, a power-driven vessel underway, when maneuvering as authorized or required by these Rules, shall indicate that maneuver by the following signals on her whistle:

- one short blast to mean 'I am altering my course to starboard';

- two short blasts to mean 'I am altering my course to port';

- three short blasts to mean 'I am operating astern propulsion'.

(b) Any vessel may supplement the whistle signals prescribed in paragraph (a) of this Rule by light signals, repeated as appropriate, whilst the maneuver is being carried out:

(i) these light signals shall have the following significance:

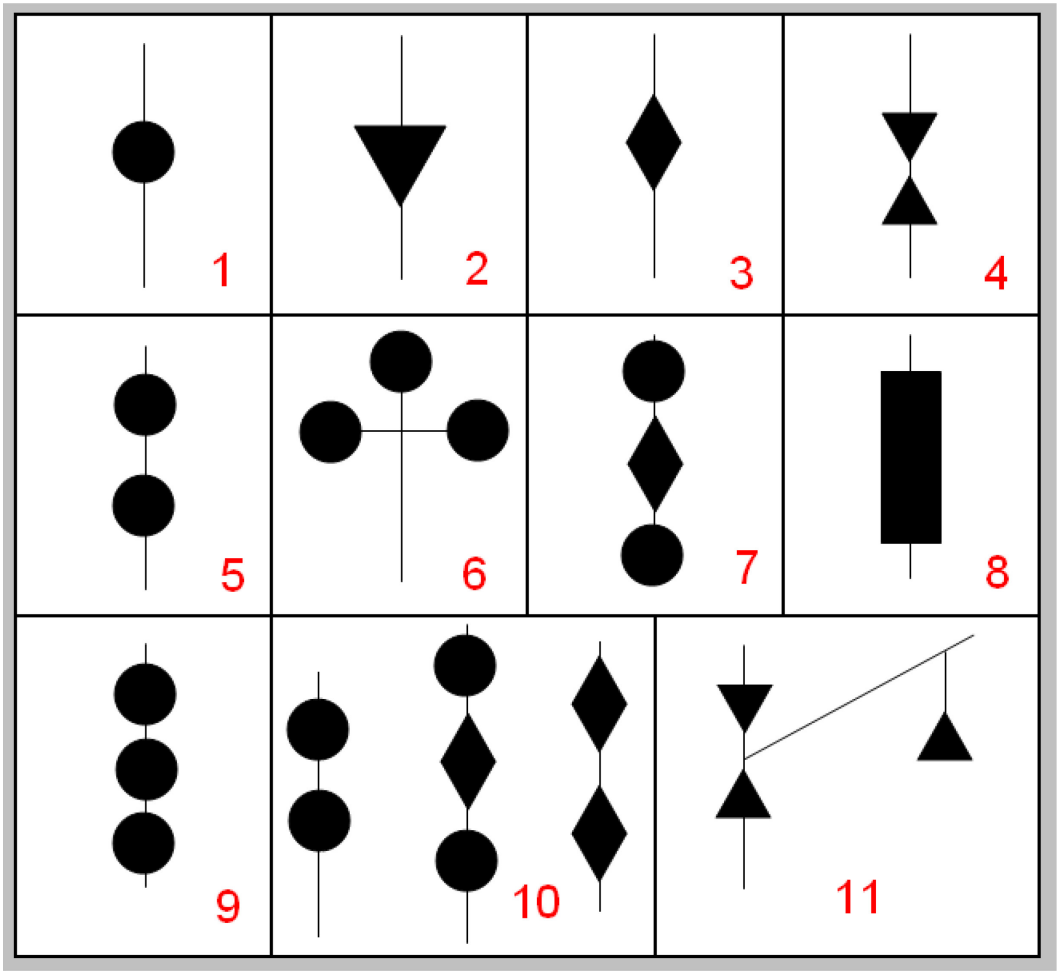
- one flash to mean 'I am altering my course to starboard' ;

- two flashes to mean 'I am altering my course to port' ;

- three flashes to mean 'I am operating astern propulsion' .

Day shapes

By day, certain vessels are required by the collision regulations to exhibit various shapes, consisting of ball, cylinder, cone, and diamond.



These shapes are illustrated in the diagram and are used by vessels with characteristics as follows.

1. A vessel at anchor shows a single ball.

2. A sailboat moving under power (motor-sailing) shows a cone with the apex pointing down.

3. A vessel engaged in towing, if the tow exceeds 200m, will show a diamond shape. The towed vessel or object will show a diamond as well if the tow exceeds 200m.

4. A vessel engaged in fishing will show two cones, apex to apex, in the shape of an hourglass.

5. A vessel not under command will show two balls.

6. A vessel engaged in mine clearance will show three balls. One at the top of a foremast and one at either end of a yard below the first ball. All three in a triangle configuration.

7. A vessel restricted in ability to maneuver will show two balls with a diamond between them. When on a vessel engaged in towing there may be a separate diamond shape if the tow exceeds 200m.

8. A vessel constrained by draft will show a cylinder.

9. A vessel aground will show three balls.

10. A vessel restricted in ability to maneuver will show the ball-diamond-ball shapes and, if there is equipment obstructing a side, the blocked side will be indicated by two balls and the open side by two diamonds.

11. A vessel engaged in fishing that has gear over the side extending more than 150m from the vessel will indicate the location of that gear with a cone with the apex pointing upwards.

Flags Used as Shapes

Some vessels will show flags that signify meanings that are similar to the use of shapes.

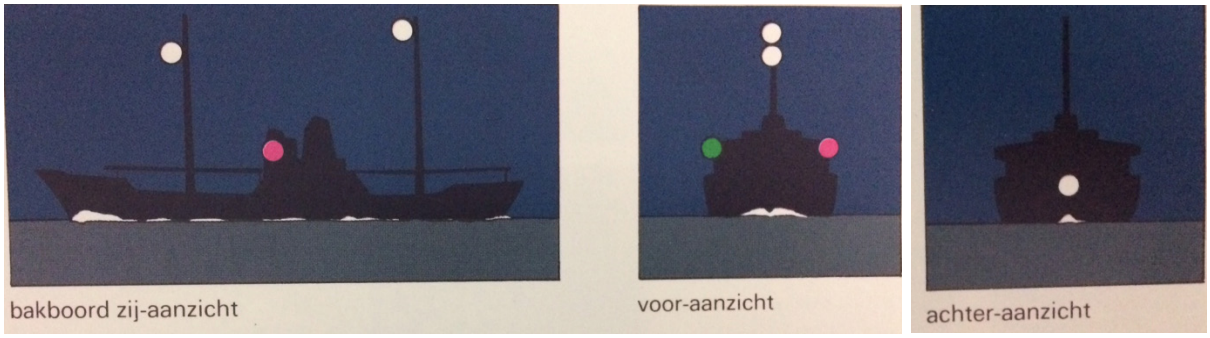
A vessel engaged in diving will show the Flag Alpha from the International Code of Signals not less than 1 meter in height and ensure its all-round visibility. Other vessels should maintain a safe distance.

International Code of Signals
Flag A - ALPHA

A vessel that is taking in, discharging, or carrying dangerous goods will show Flag Bravo from the International Code of Signals.

International Code of Signals
Flag B - BRAVO

Appendix to regulations for preventing collision at sea



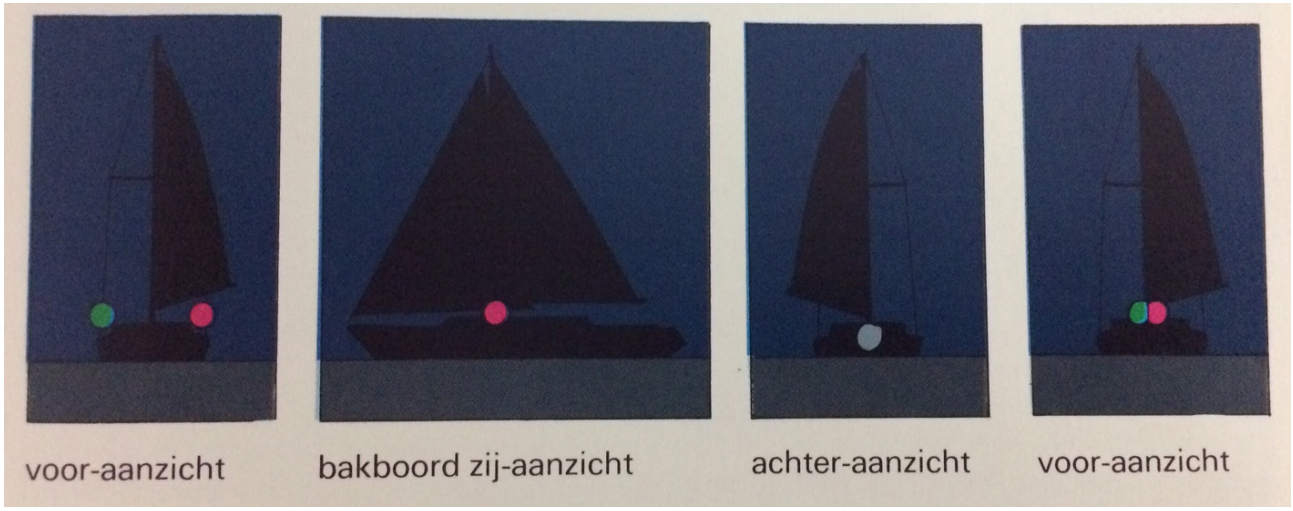
Power-driven Vessels underway, L > 50 m

Power-driven vessel of less than 7 meters in length whose maximum speed does not exceed 7 knots.

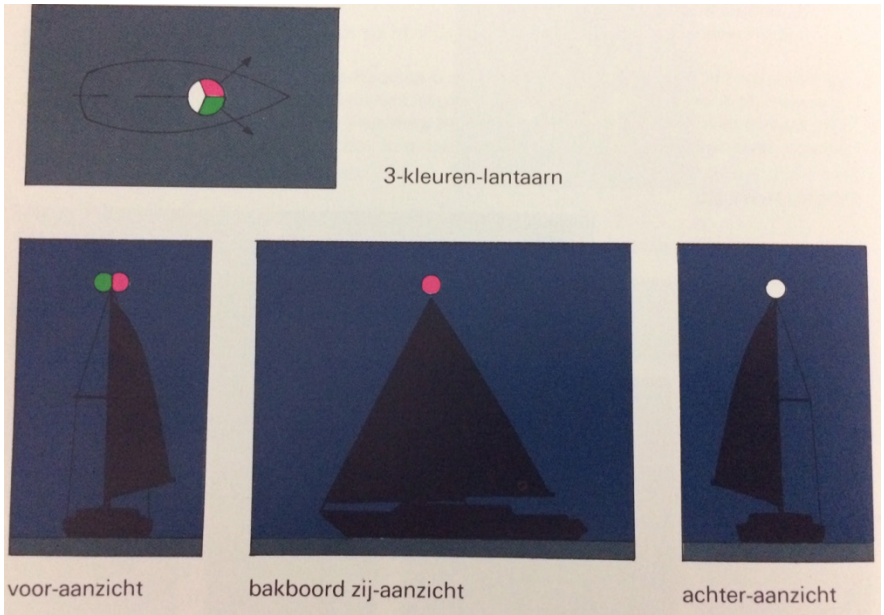
A power-driven vessel when towing, length of the tow, measuring from the stern of the towing vessel to the after end of the tow exceeds 200 meters.

A power-driven vessel when towing, length of the tow, measuring from the stern of the towing vessel to the after end of the tow exceeds 200 meters.

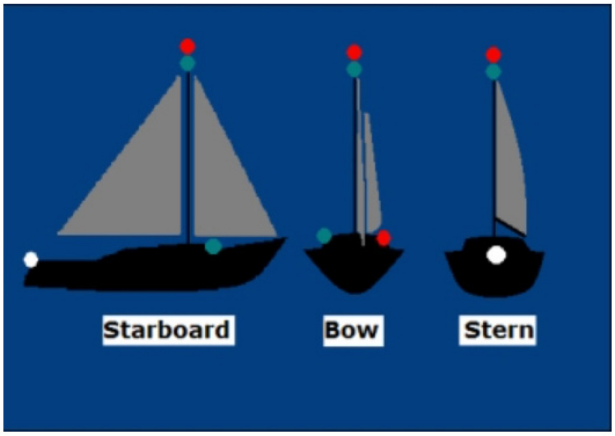
x



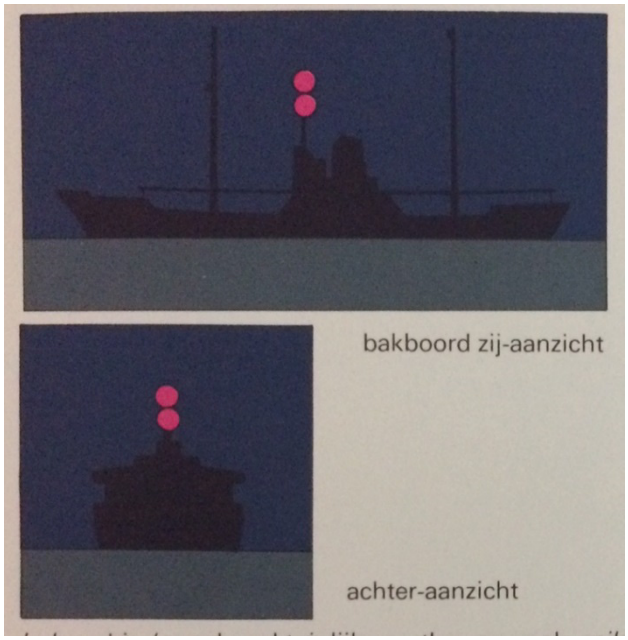
Sailing vessel underway.



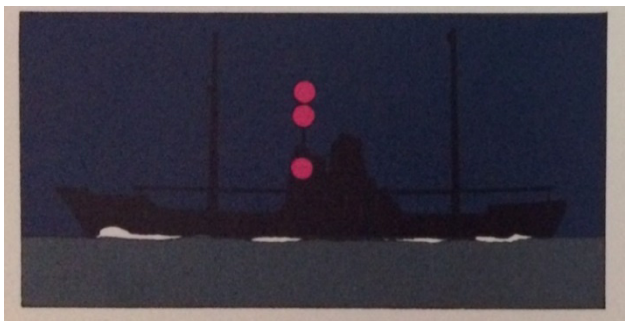
Sailing vessel underway, L < 20 m, combination light allowed.



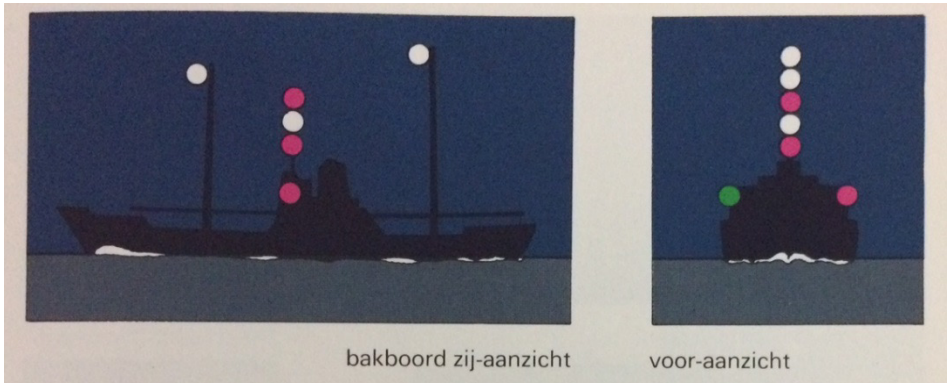
Sailing vessel underway



Vessels not under Command not making way through the water.

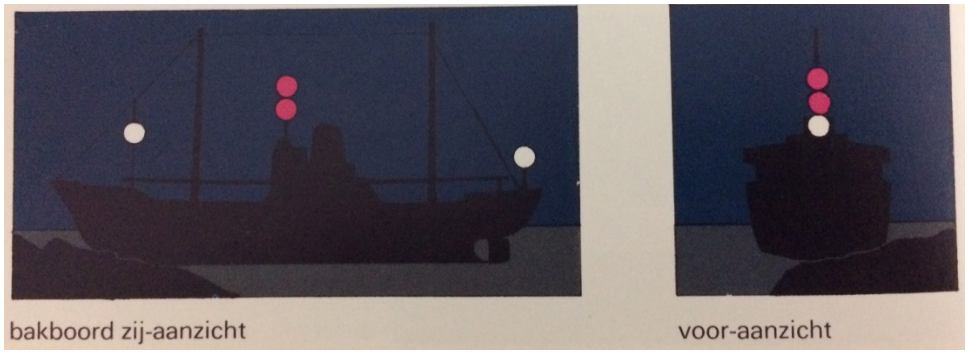


Vessels not under Command making way through the water.

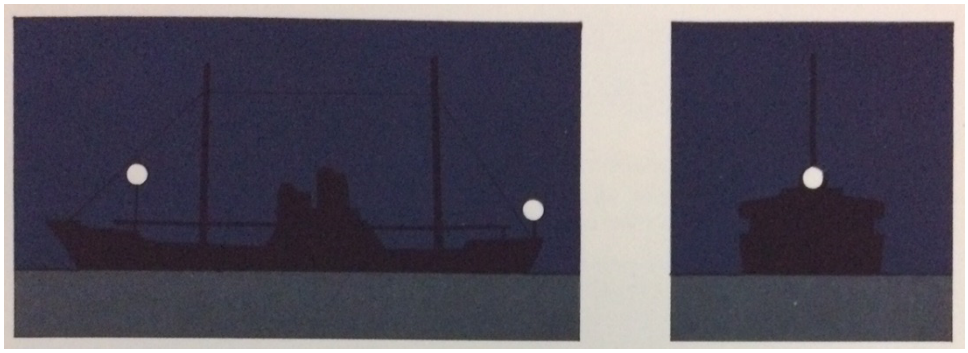


Vessels Restricted in their ability to maneuver.

A vessel engaged on pilotage duty, underway



A vessel aground



A vessel at anchor

Question 1:
You observe the lights of two ships, one on your portside and one on your starboard side
Give / identify the type of ship, her status, her aspect and if possible, her length

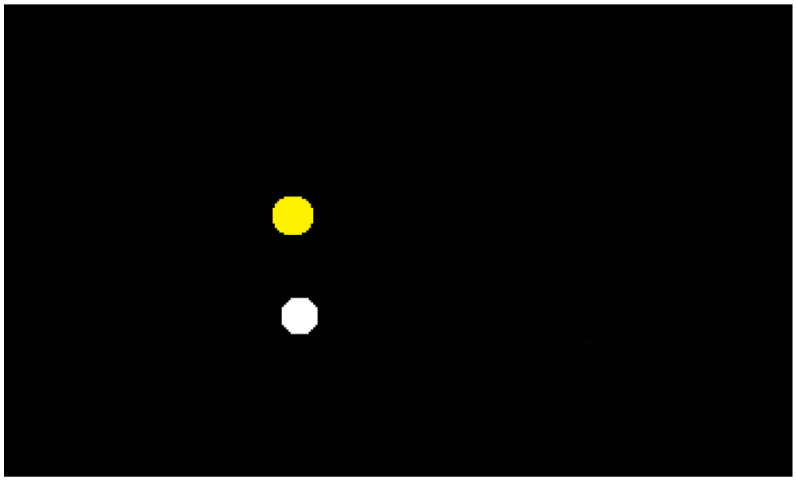
Answer 1:
The vessel on your starboard is a motor vessel <50m, looking at her starboard side and therefore moving away from you

The vessel on you portside can be different types of ships:

1) a small vessel < 7m and speed < 7kn
2) sailing vessel from the stern
3) any motor vessel from the stern

Question 2:

You observe the lights of the below ship
Give / identify the type of ship, her status, her aspect and if possible, her length

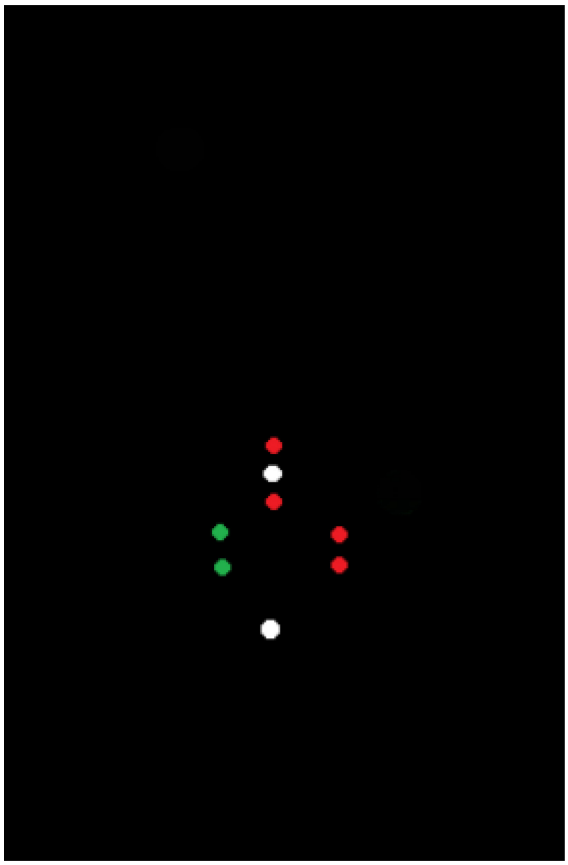


Answer 2:
The vessel in front of you is a tug busy with towing looking at her stern.
This means that the object in tow is nearby, but the light is not in front of you and therefore might be behind you.

In other words: extreme caution is needed because you might find yourself between the tug and her tow and close to the tow line

Question 3:

You observe the lights of below ship
1) Give / identify the type of ship, her status, her aspect and if possible, her length
2) What would be the daymarks of this vessel

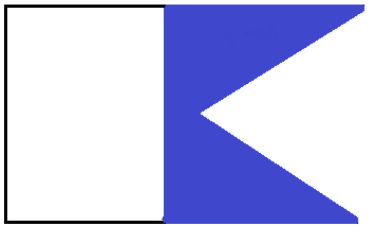


Answer 3:

Lights:
The vessel is a vessel restricted in her manoeuvrability looking at her stern
When overtaking we should pass on her portside side

Daymarks:
On top, a black ball, black diamond, black ball below each other
On the SB of the vessel, I will see two black balls below each other
On the PS side of the vessel, I will see two black diamonds below each other

Question 4:
You observe the below Flag

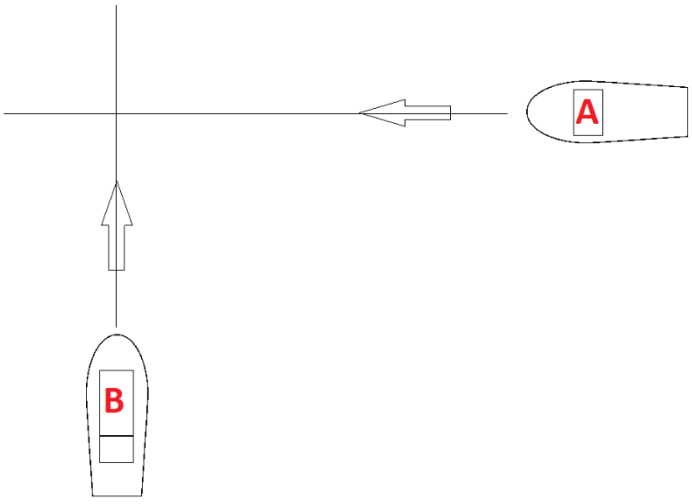


What does this mean and how to proceed?

Answer 4:
The vessel is working with divers under water.
You give the vessel a wide berth, and reduce speed, so your bow and stern waves will be reduced

Question 5:

You are sailing on vessel A and you encounter a crossing situation with a danger for collision
What do you do?



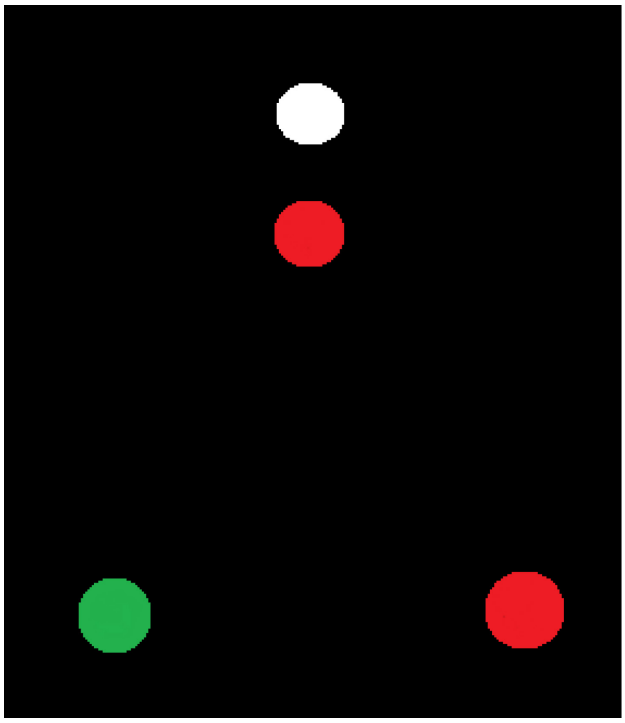
Answer 5:

At first you should keep course and speed, as vessel B needs to give away.
However if you notice that the other vessel is not doing anything to avoid a collision, you should do everything to avoid a collision

Question 6:

You observe the lights of the below ship
Give / identify the type of ship, her status, her aspect and if possible, her length

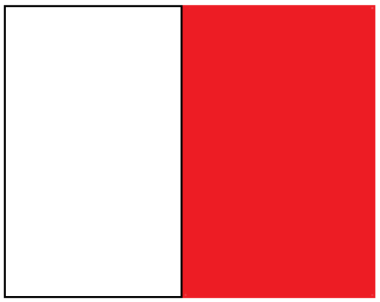
What will be the signal Flag of the vessel?



Answer 6:

Lights:
The vessel is engaged in pilotage duty, looking at her bow and approaching head on

Flag:



Question 7:

You observe the below Flag
What does the flag means and what will you see during nighttime?

Answer 7:
Discharging /loading dangerous cargo, at nighttime you will see in the aft mast a red light 360drG

Question 8:

You hear one short blast; what does this mean?

Answer 8:
I am altering my course to starboard

Question 9:

You hear two short blasts; what does this mean?

Answer 9:
I am altering my course to port

Question 10:

You hear three short blasts; what does it mean?

Answer 10:
I am operating astern propulsion

B3: Local knowledge and regulations

The Small Commercial Vessel (SCV) Code

A commercial vessel needs to be certified. This to make sure the vessel is built and equipped under the compliance of the international maritime conventions and codes.

Definitions:

Exposed waters mean any waters that are more than 20 nautical miles from a harbor or safe refuge, or those other waters which are so designated by the Administration.

Coastal waters mean an area designated as such by an Administration in respect of its territorial seas and contiguous zone but which does not in any case extend to more than 20 nautical miles from a harbor or safe refuge.

Protected waters means an area designated as such by an Administration for the operation of small vessels in respect of its territorial seas, which consists of sheltered waters presenting no special hazards.
Where an Administration has not otherwise designated an area, it means an area which does not in any case extend to more than 3 nautical miles from a safe refuge.

Sheltered waters presenting no special hazards. Where not so designated, it means an area which does not in any case extends to more than 3 nautical miles from a safe refuge.

Harbour or Safe Refuge means a port, inlet or other body of water normally sheltered from heavy seas by land presenting no special hazards and into which a vessel can safely navigate and where the persons on board can disembark into safety. The suitability of a location as a safe refuge is as determined by the Administration.

The SCV Code applies to vessels operating commercially, trading in the Caribbean Trading Area, which are 5 meters or more in length overall and less than 24 meters in length (L) and which, if carrying more than 12 passengers, operate within 20 miles of the nearest harbor or safe refuge, carry not more than 150 passengers and where overnight accommodation is provided, not more than 50 passengers overnight.

An SCV Safety Certificate may be obtained or renewed by making an application in writing to the Administration. The application for inspection of a vessel being newly constructed or converted shall be submitted prior to the start of the construction or conversion.

The construction and arrangement of a vessel shall allow the safe operation of the vessel in accordance with the terms of its SCV Safety Certificate giving consideration to:

1. Provisions for a seaworthy hull;
2. Protection against fire;
3. Means of escape from all spaces likely to be occupied by passengers or seafarers.
4. Guards and rails in hazardous places;
5. Ventilation of enclosed spaces; and
6. Necessary facilities for the accommodation and use of passengers and seafarers.

A vessel of a foreign country, whose government has inspection laws approximating those of
this Code or through bilateral or multilateral agreement, shall have on board a current valid safety
certificate, certificate of inspection, or other certificates permitting the carrying of passengers, or cargo in the appropriate sea areas, issued by its Government.

The person in possession of a boatmaster (BM) 1,2 or 3, boat engineer (BE) 1 or 2 and/ or STCW licence is allowed to sail on Small Commercial Vessels.

The Small Commercial Vessel must comply with the international rules of the Small Commercial Vessel code (SCV code).

The ship's SCV certificate exists of the frontpage with:
1. The issuing authority (flag State)
2. Ship's particulars,
3. Issue date and date of expiry
4. The maximum allowable persons on board,
5. The minimum amount of crew and certification,
6. The area for where the ship is allowed to perform their commercial activities.
7. Exemptions and equivalences

The certificate will be accompanied with the equipment list, on this list you will find the required safety equipment and the required navigational equipment on the ship.

Together they are the SCV certificate.

The SCV Safety Certificate and any stability letters shall be posted under glass or other suitable transparent material, such that all pages are visible, in a conspicuous place on the vessel where observation by passengers is likely. Where posting is impracticable, the certificates shall be kept on board in a weathertight container readily available for presentation to passengers and, officials of the flag State or port State when requested.

A vessel to which the Code applies shall not be operated without having on board a valid SCV Safety Certificate issued by their flag Administration. The form of the certificate is at the end of this chapter.

This certificate shall remain valid for a period not exceeding 1 year for vessels carrying more than 12 passengers on international voyages and not exceeding 5 years for all other vessels from the date of inspection, provided that the vessel successfully completes an annual inspection or unless revoked by the Administration.

The inspection for the renewal of the certificate shall be conducted up **to 3 months prior to the expiry of the SCV Safety Certificate**. Where the renewal inspection is completed within the three months prior to the date of expiry of an SCV Safety Certificate or Certificate of Inspection, the new certificate may be issued for a period extending to 1 or 5 years from the expiry date of the previous certificate as appropriate.

Documents besides the SCV certificates
Besides the valid SCV certificate, there must be more certificates on board of a commercial vessel.

For the vessel
The SCV certificate
Ship radio station licence

For the crew
The correct and valid BM, BE and/or STCW licences
The medical certificate for every crew member
The radio licence
The basic safety certificate
For crew members on passenger vessels crowd management and safety training for personnel providing direct service to passengers

Where a certificate has expired or ceased to be valid, the officer carrying out the control shall take steps to ensure that the vessel shall not sail until it can proceed to sea or leave the port for the purpose of proceeding to the appropriate repair yard without danger to the ship or persons on board.

Beside the SCV code, vessel needs to be in compliance with other rules and conventions as well.

Marpol convention is the convention for prevention of all kinds of marine pollution. According to this convention, no ship is allowed to discharge any oily bilge water overboard or to throw any garbage overboard, including non-comminuted food waste.

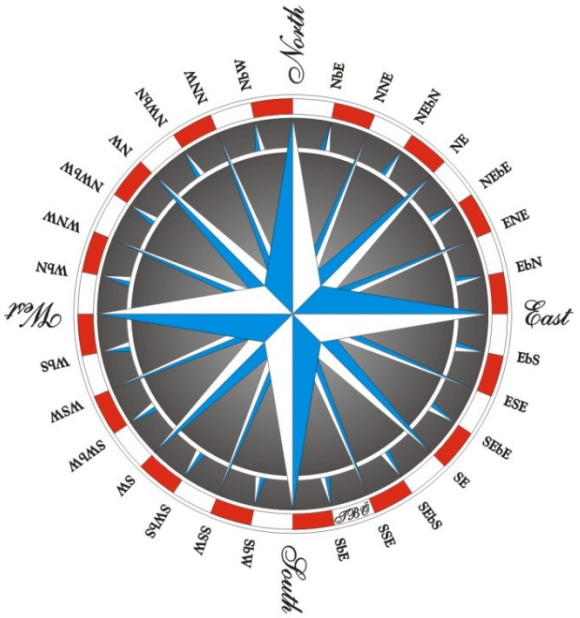
Every country is who agreed to use the SCV code is obliged to add the code to their own national regulations for international trading vessels. The text in the national legislation is leading and can differ from the code. The national legislation should be equivalent or more stringent that what is described in the code

Regulation Safety Seagoing Vessels

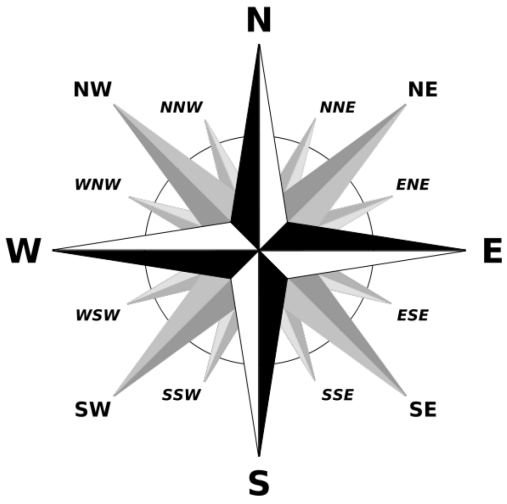
Ships registered in the Caribbean Netherlands busy with National trading which are not brought outside the territorial boundaries, as described in the article 41b second paragraph of the same regulation, are exempted from the SCV technical requirements, provided that the requirements, as referred to in Annex 6 of the Regulation Safety Seagoing Vessels, have been complied with.

B4 Seamanship

32 – Points Compass Rose



16 – Point Compass Rose



N	=		= 000°
NE	=	4 streken (4 points)	= 045°

East	=	8 streken	(8 points)	= 090°
SE	=	12 streken	(12 points)	= 135°
S	=	16 streken	(16 points)	= 180°
WEST	=	24 streken	(24 points)	= 270°
NW	=	28 streken	(28 points)	= 315°
N	=	32 streken	(32 points)	= 360°

B4.1 Common Nautical terms

1. Bow - Refers to the front end of a boat.

2. Stern - Refers to the rear end of a boat.

3. Forward - When you are moving towards the front end of a boat, this is called going "forward."

4. Aft - When are you moving towards the rear end of the boat, this is called going "aft."

5. Underway - When a boat is moving, either by motor or wind, this is called being "underway."

6. Ahead - Refers to a boat moving in a forward direction.

7. Astern - Refers to a boat moving in a backwards position (reverse).

8. Port - Standing at the rear of a boat and looking forward, "port" refers to the entire left side of the boat.

9. Starboard - Standing at the rear of a boat and looking forward, "starboard" refers to the entire right side of the boat.

10. Port Bow -Refers to the front left of a boat.

11. Port Quarter - Refers to the rear left side of a boat.

12. Starboard Bow - Refers to the front right of a boat.

13. Starboard Quarter - Refers to the rear right of a boat.

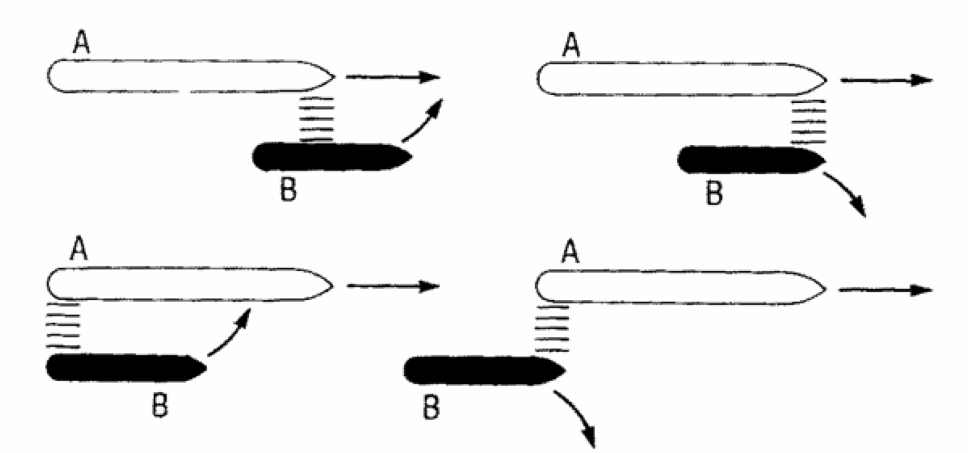
14. Amidships -The central part of a boating vessel.

15. Topside - Moving from a lower deck of a boat to an upper deck.

B4.2 Interaction with other vessels

The pressure fields of two vessels in close proximity on the same or opposite headings will Interact and require corrective action to maintain course. The large suction zone around the longer of the two vessels may be the dominating factor in Interaction between vessels of significantly different size. This may present a very dangerous situation for the smaller vessel, particularly if it is overtaking.

Factors that increase the risk of interaction are, high speed, large size vessel, narrow channel and shallow water. The pressure waves that create Interaction are proportional to the square of the vessel speed, thus the effects of all forms of interaction can be instantly reduced by reducing speed. In some cases, consideration will have to be given to the loss of steering control associated with speed reduction.



Transverse Thrust:

As well forward as astern thrust, your propeller causes transverse or sideways thrust. This is often referred to as 'paddle wheel effect'. If the pitch or twist in your propeller blades was such that they were parallel to the shaft it would act as a paddle wheel and drag the stern of your boat around in circles!

Depending on the design of the propeller and boat, transverse thrust will have some sideways effect. Going ahead on a displacement vessel with a right handed propeller (one that turns clockwise and viewed from astern) transverse thrust will wind the stern of the vessel to the right or starboard and there will be a corresponding movement of the bow to port.

Right handed propeller – transverse thrust

This is not all that noticeable when going ahead because the rudder takes care of it. It will make its presence felt when going hard astern when there is broken water over the rudder. The stern will wind to port and the bow will go to starboard with very little you can do about it!

B4.6 The importance of navigating at reduced speed to avoid damage caused by own vessels bow or stern wave.

Navigating at a reduced speed is crucial for mitigating damage caused by a vessel's own bow- and stern waves. Reducing speed helps minimize the force of waves impacting the hull, reducing stress on the structure, particularly at the bow and stern. This practice is essential for safe navigation, especially in rough seas or when operating in confined or shallow waters.

Here's why navigating at a reduced speed is important:

- Reduced Hull Stress:

Higher speeds generate larger waves, which can cause the hull to bend and flex, leading to structural stress, especially at the bow and stern. Reducing speed minimizes the impact of these waves, decreasing the stress on the hull.

- Improved Visibility:

In rough seas, reducing speed allows for better visibility of the water's surface, helping the navigator identify potential hazards and adjust course accordingly. This is especially important in shallow or restricted waters where the risk of grounding is higher.

- Reduced Hydrodynamic Interactions:

At higher speeds, ships create strong hydrodynamic pressure fields that can lead to interactions with other vessels, shorelines, or seabed structures. These interactions can cause maneuvering difficulties and damage. Reduced speed minimizes these interactions.

- Prevention of Slamming and Pitching:

In rough seas, excessive speed can cause the bow to slam into waves, leading to damage and discomfort. It can also cause pitching (up-and down motion of the bow and stern), which can be reduced by slowing down.

- Minimizing Coastal Erosion:

In waterways, the bow wave generated by a ship can cause erosion of the shoreline. Reducing speed can significantly reduce the size and impact of the bow wave, minimizing erosion.

- Maintaining Control:

While reducing speed is important, it's also crucial to maintain adequate speed for steerage and maneuverability, especially in adverse conditions. Finding a balance between speed reduction and maintaining control is key to safe navigation.

- Avoiding Grounding:

Reduced speed allows for better visibility and maneuverability, helping to avoid grounding in shallow or restricted waters and limit the damage when running aground.

B4.8 Basic knowledge of hazards associated with towing

Towing

Towing operations are mostly conducted when a vessel is not able to move by its own propulsion.
There are three different ways of towing;
1) Towing with a single long line
2) Towing with two crossed towing lines
3) Towing alongside of the towed object

It is essential that checks should be completed on board the tug and vessel or barge to be towed, which should include:

1) All water/weathertight openings are securely closed with signs indicating that they should remain closed for the duration of the voyage. It is a reality that tugs have capsized as a result of doors and ports being left open when in difficulty, e.g. girting (often also called girding or tripping). down flooding is a real danger to small tugs. Lifesaving and fire-fighting appliances must always be operational.

2) Navigational equipment, wheelhouse whistles, horns, shapes for day signals and communication gear are fully operational.

3) All critical machinery prior to commencing a towing operation should be confirmed as operational – this would include; main engine, steering gear and towing equipment (winches, wires) etc.

4) All personnel are fully familiar with the intended towage plan and their responsibilities.

5) Any change of fuel and ballast to the tug and/or tow have been fully calculated and the crew are aware of any factors of concern.

Checks on board **the towed vessel or barge**

1) The tow should not proceed until a satisfactory inspection of the tow has been carried out by a competent party. Checks should include:

2) Condition of the towing arrangements.

3) Condition of the anchoring equipment if fitted.

4) Condition of tow including an inspection of the peaks and buoyancy spaces to check for water ingress.

5) Watertight integrity of the unit to be towed; obvious signs of damage, especially in the hull and deck plating. Hatchways, ventilators, doors, scuttles, manholes and other openings are closed and sea valves shut.

6) Fore- and aft drafts, appropriate freeboard for the voyage and no evidence of a list. Generally, a slight trim by the stern ensures that the tow is laterally stable when towed

7) Power is available for navigation lights.

8) Safe method of boarding available (portable or fixed rungs).

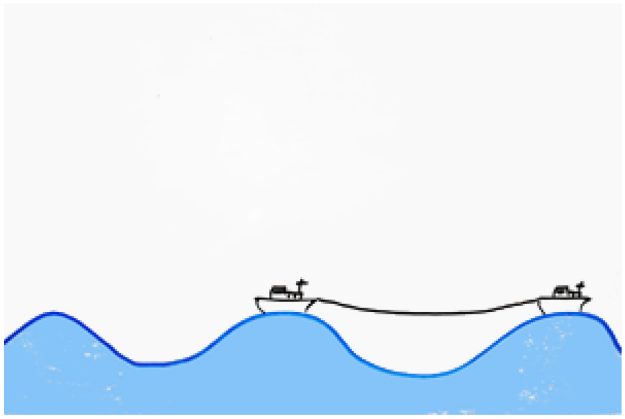
9) Emergency towline rigged.

Lifesaving and fire-fighting appliances are in good condition and in the regulatory number required.

Once the towing line is connected, the tug is always in command of the towing combination.

Before you start towing you need to make sure that your towing line and all the shackles you need to connect the tow, are more than strong enough for the towing operation.
Once the towing line is connected, then specially when there is no helmsman on board of the towed object, the rudder needs to be secured in midship position.

Towing with a long single line
Towing with a single long line is mainly used when the combination is sailing in vast waters.
Especially when there is a swell, the towing with a single long line has the benefits that the line can be adjusted to a length that the tug and the towing object climb the waves at the same time. At the same time, the longer the line, the more it can be stretched, and therefore it will break less easy.
The length of the towing line should be minimum 3 times the wavelength.

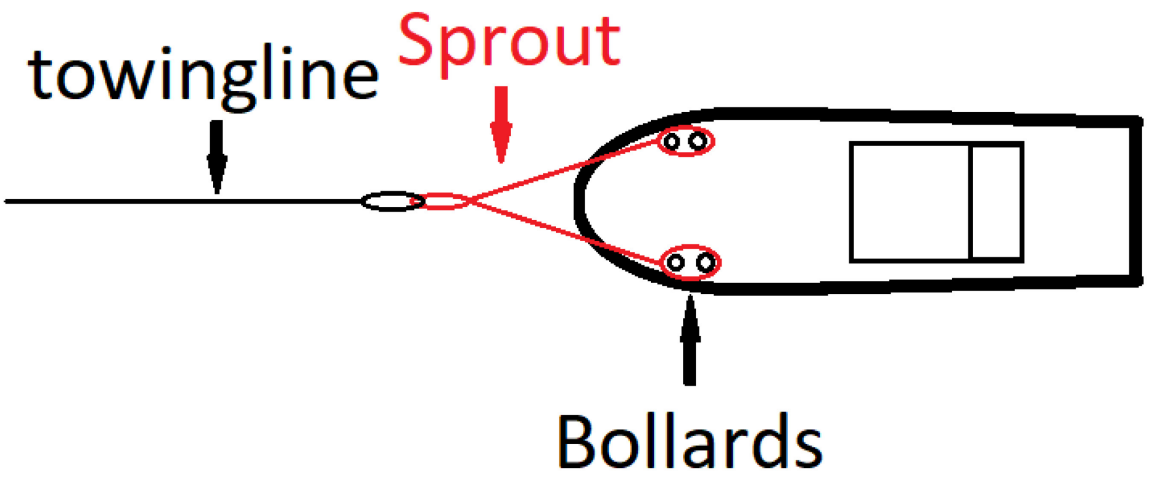


Connecting towing lines to the towing object. Connecting the towing line must be

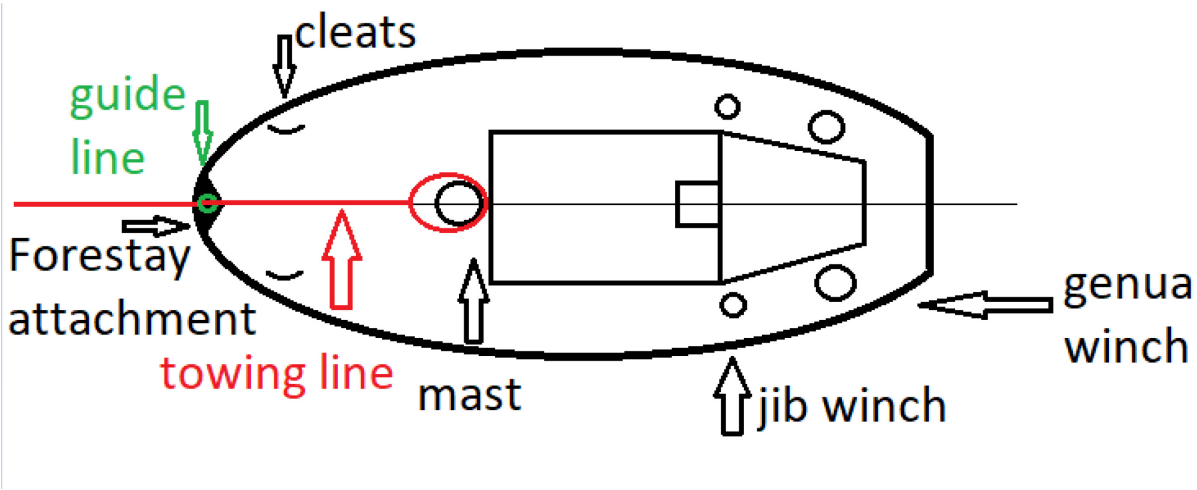
done with great care and understanding of the construction of the towed object.

Most of the polyester vessels are not build strong enough that the towing line can be attached to the first cleat on the foredeck.

For polyester motorboats it is most commonly to connect a sprout on the towing object to divide the towing forces. On the other side of the sprout, the towing line will be connected.

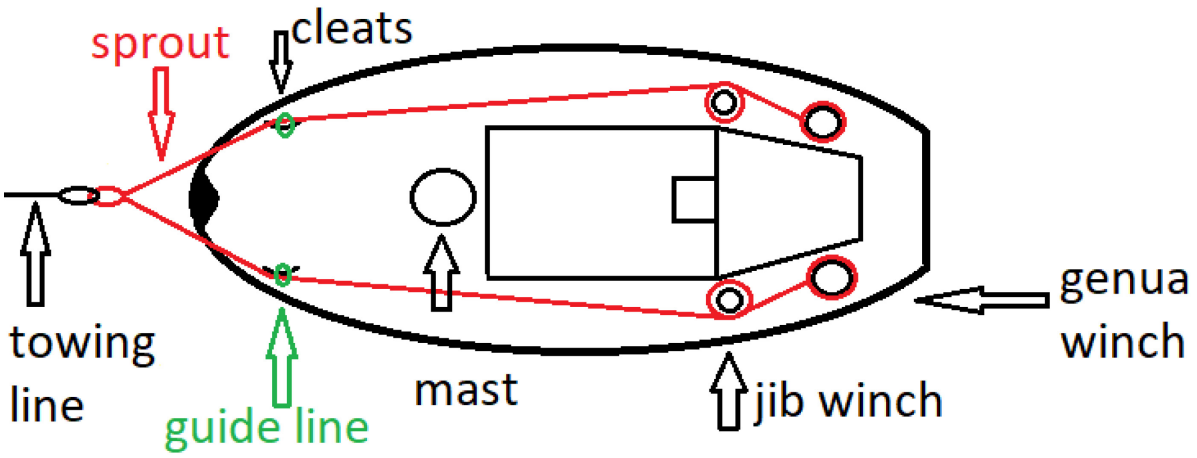


When a sailing yacht needs to be towed, the mast foundation is the strongest point for towing.
Once the towing line is connected around the mast foundation, the towing line will be kept to the bow by a guideline around the towing line, connected to foreship. (forestay connection)



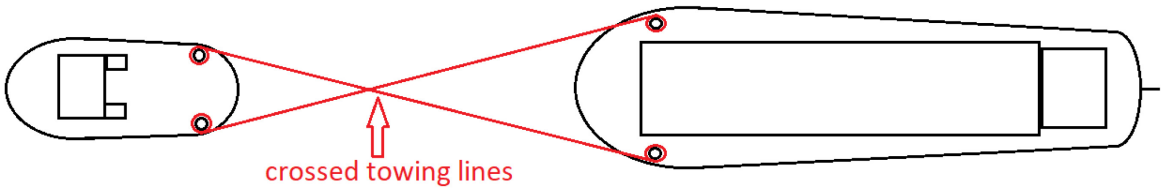
For towing a sailing vessel, you can also use a sprout. Still when you use a sprout you need to think about the strong points. Most cleats are screwed on deck without any enforcements in the construction below deck.

In this case you guide the sprout by the cleats on the foredeck, by the Jib winches, and finally attach the sprout on to the genua winches.



Towing with two crossed towing lines

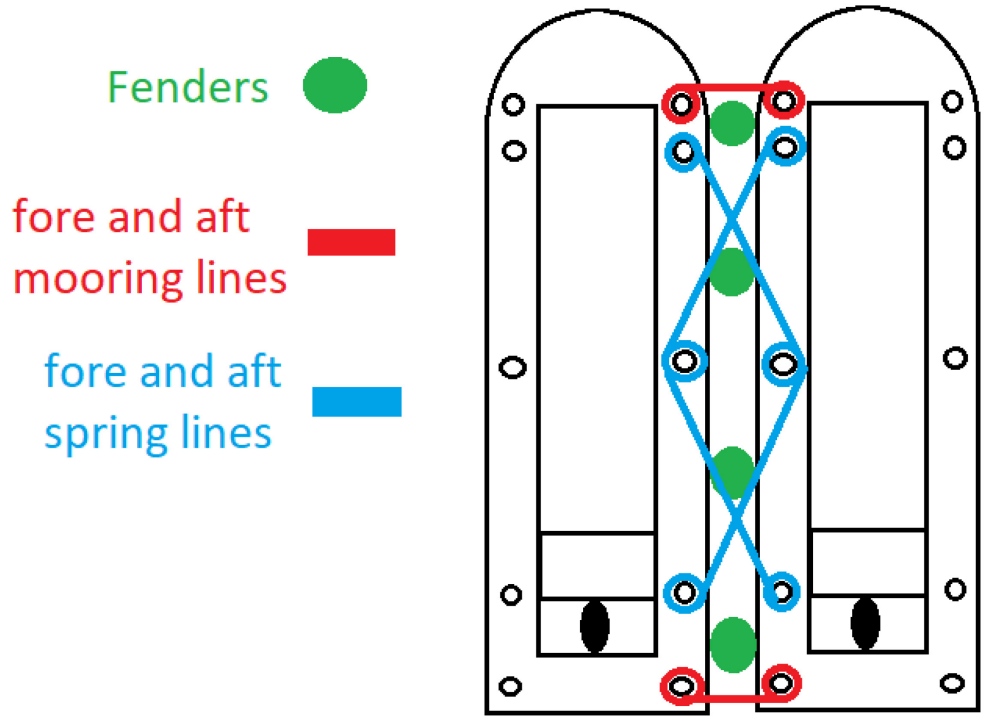
This is used when the water becomes narrower, and with less swell.
Most of the time the two towing lines are less long as with a single towing line.
This in combination with the two crossed towing lines makes it easier for the towing combination to manoeuvre, especially when there is no helmsman on board of the towed object



Towing alongside

This is mainly done in confined areas with minimum amount of swell.
You will need some serious fenders placed well between the two vessels. Then place the tug so that the bow is slightly pointing to the towed object. Secure the tug onto the towing object with forward and aft lines. Then start connecting the rear spring and front spring from both the vessels.
Once you are on your way, keep in mind that, the combination will turn more difficult due to the fact that the propellor is not in the centre of the combination.

Also, the tug needs to correct the heading due to the fact that the rudder is not in the centre of the combination.



Starting the tow

Once you decided how you want to tow the object and you are finished with the preparations, you can start towing. The towing operation itself can become quickly verry dangerous.

First of all, you need to understand that you are going to tow an object which is very heavy, so this counts also for your towing equipment as shackles, ropes and chains. People can hurt themselves easily working with this equipment's and personal protective equipment shall always be worn before you start a towing operation.

Once the tugboat starts to tow with a single line, it is very important that the towing line will be slacked out under control.
This prevents that the towing line can become tangled in the propellor(s). And at the same time, it prevents shocks in the towing line, once the line is coming under tension. The shocks can break the towing line and then you lose your tow, or it can intervene with the manoeuvres of the tug.

While slacking out the towing line it is very important to stay well clear with your hands and feet from any moving ropes, people can lose arms or legs when they get stuck in a towing line.

Once the tow is assembled, one must be ready to quickly release the towing line. This in case something happens with the towing object or with the tug. It might come to a situation, that the towing object will sink during the tow. As in most of the cases, the towing object will be bigger than the tug, this might result in pulling the tug underwater with the sinking towed object. One must also be aware that the towing object can run over the tug if the tug suddenly loses its speed. The towed object will slow down much slower than the tug, and therefore it can run over the tug.

In case the tug has a quick release system for the towing line this must be tested before starting the towing operation. In case the tug is not an official tug, but another vessel who helps a vessel by towing, these ships must put an axe or manchette close by the towing line, to be able to cut the line in case this will be necessary.

B7 Distress signals

SCV Chapter VI - 4 regulates the distress signals

4 Distress signals

4.1
All vessels to which the SCV Code applies shall carry:
.1 six handheld red flare signals;
.2 two buoyant orange smoke signals; and
.3 six rocket parachute flares.

Provided that vessels operating solely in protected areas may carry six hand-held red flare signals, two buoyant orange smoke signals and two rocket parachute flares.

4.2
Distress pyrotechnics shall be stowed in a portable watertight container carried at the operating station.

4.3
Each distress signal shall be clearly marked with the date of manufacture and the date of expiry.

Annex 6 vessels shall carry, as a minimum, two handheld flares and 2 parachute flares

a

b

b

Examples of red hand flare (a), buoyant orange smoke signal (b) and parachute flare, next page (c)

A parachute flare:

- creates a single red star;
- rocket parachute flare produces a single bright red star that shoots about 300 meters into the sky and slowly falls down;
- is easily seen from the ground or air; and
- burns for at least 40 seconds.

(c) (c)

Visual distress signals can only be effective when someone is in a position to see them. Therefore, when employing pyrotechnic devices, do so only when you see or hear a boat or airplane, or you are reasonably sure that someone on shore is in position to see your signal and take action.

Visual distress signals can be used by day especially the orange smoke signals but the flares are most effective at night or in restricted visibility such as fog or haze.

Thirdly, visual distress signals help the helicopter crew to determine the wind direction.

(a)

1 Make sure your radiotelephone is on.

2 Select 156.8 MHz (channel 16 VHF) or 2182 kHz. (Channel 16 VHF and 2182 kHz on SSB are for emergency and calling purposes only).

3 Press microphone button and, speaking slowly – clearly – calmly, say:

1 "MAYDAY-MAYDAY-MAYDAY" for situations involving Immediate Danger to Life and Property; or

2 "PAN-PAN-PAN" for urgent situations where there is No Immediate Danger to Life or Property.

3 Say: "THIS IS (INSERT VESSEL'S NAME), (INSERT VESSEL'S NAME), (INSERT VESSEL'S NAME), (INSERT VESSEL'S CALL SIGN), OVER."

4 Release the microphone button briefly and listen for acknowledgement. If no one answers, repeat steps **1**or**2 & 3**.

5 If there is no acknowledgement, or if the Coast Guard or another vessel responds, say: "MAYDAY" OR "PAN", (INSERT VESSEL'S NAME)."

6 DESCRIBE YOUR POSITION using latitude and longitude coordinates, or range and bearing from a known point.

7 STATE THE NATURE OF THE DISTRESS.

8 GIVE NUMBER OF PERSONS ABOARD AND THE NATURE OF ANY INJURIES.

9 ESTIMATE THE PRESENT SEAWORTHINESS OF YOUR VESSEL.

10 BRIEFLY DESCRIBE YOUR VESSEL: (INSERT LENGTH, COLOR, HULL TYPE, TRIM, MASTS, POWER, AND ADDITIONAL DISTINGUISHING FEATURES).

11 Say: "I WILL BE LISTENING ON CHANNEL 16/2182."

12 End message by saying: "THIS IS (INSERT VESSEL'S NAME & CALL SIGN)."

13 Where your situation permits stand by the radio to await further communications with the Coast Guard or another vessel. If no answer, repeat, then try another channel.

B8 Passenger safety

Record of passengers
The owner, charterer, managing operator or master of a vessel on any other type of voyage shall keep a correct, written count of all passengers, which embark on and disembark from the vessel.

Prior to departing on a voyage, the passenger count shall be communicated to a representative of the owner or managing operator of the vessel.

Distribution of passengers
Make sure that the passengers are equally divided over the ship to avoid large heel or trim during the embarkation, disembarkation and voyage.

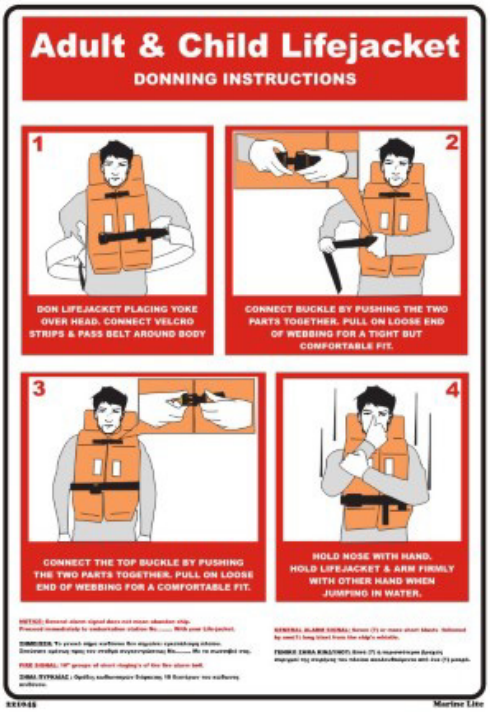
Maximum amount of passengers
The master of the vessel shall never carry more passengers than for which the vessel is certified.

Before moving away from the jetty or beach there are a few things you should check.

.1 Make sure your engine will start before 'letting go'.
.2 Check that your passengers are seated safely.
.3 Check the stowage of all gear to make sure it doesn't move about.
.4 Have weight distributed evenly so you are not badly listed. If you know the vessel tends to 'twist' to port because of transverse thrust, you could start off listed a little to starboard.
5. Never overload your vessel, check the load mark during loading embarking passengers and again before departure.

Before getting underway on a voyage where passengers are carried, the master of a vessel shall ensure that suitable public announcements are made informing all passengers of the following, as applicable to the vessel's operations and arrangement:

.1 a general explanation of emergency procedures;
.2 the location of emergency exits and survival craft embarkation areas;
.3 the stowage location of lifejackets;
.4 the proper method of putting on and adjusting lifejackets of the type carried on the vessel including a demonstration of the proper donning of lifejacket;



The master of a vessel shall require passengers to wear lifejackets when possible hazardous conditions exist, including, but not limited to:

.1 when transiting hazardous bars and inlets;
.2 during severe weather;
.3 in event of flooding, fire or other events which may possibly call for evacuation; and
.4 when the vessel is being towed.

Sufficient emergency instructions shall be posted to enable passengers to know what action to take in the event of an emergency.

When all is ready, move off steadily being aware of other vessels and speed or wash restrictions.

B9 Legal responsibilities towards passengers and seafarers

Safe access and basic security issues needs to be in place.

Location and positioning
As far as is practical, the means of embarkation and disembarkation should be sited clear of potential hazardous areas and should not be placed where suspended loads may pass overhead.

Lighting and markings
Adequate lighting should be provided to illuminate the means of embarkation and disembarkation, including the positions on deck and ashore.

A lifebuoy, equipped with a self-igniting light and a buoyant lifeline, should be available for immediate use in the vicinity of the embarkation and disembarkation arrangement when in use.

Watchman
Even if it is not always required under local regulations for some ships to comply with the International Ship & Port Facility security Code (ISPS) Code, it is good practice to have a member of the vessel's crew permanently stationed at the gangway for safety and security purposes. A watchman is able to assist persons transiting the gangway and monitor any dangerous practices.

Ship security system
As the commercial vessel must be in compliance with SCV code, the vessel must also be in compliance with the ship security according to the International Ship and Port Security code (ISPS code)
The ISPS Code is essential for ensuring security in the maritime sector and preventing threats such as terrorism at sea.

Th ISPS code works with three security levels, level 1 is the lowest security level, and level 3 is the highest security level. In port the security level from the ship should be the same as the level of the port. This means that the vessel must know what security level the port of arrival has at the moment of arrival and adopt the security measures to come to the same security level.

Whatever the security level might be, the crew must be in control of the ship, and therefore in control for the access to the ship. People are not allowed to enter the ship without being checked by the ship's crew even when the guests are already checked before they enter the vessel.

This does not mean that all the doors need to be locked, they can also be sealed. In any case the crew must think about the safety. This means that in controlling the areas it is not allowed to secure a door with a bar from the inside. This in case something happens, rescue teams must be able to open the door from both sides.

Passenger Ships on international voyages and issued with a SOLAS Passenger Ship Safety Certificate shall in addition to the requirements of the SCV Code, comply with the requirements of the following:

The owner of a passenger vessel engaged on international voyages, or any other organization or
person such as the manager or the bareboat charterer who has assumed responsibility for the operation
of the ship from the owner, and the vessel shall comply with the requirements of:

.1 Chapter XI-2 of the International Convention for the Safety of Life at Sea (SOLAS) 1974 as amended; and
.2 the International Ship and Port Facility Security (ISPS) Code for the Security of Ships and of Port Facilities, adopted in London on 12 December 2002.

International Safety Management system (ISM system)

Besides the ISPS code, there is also the ISM code, in this code the rules are set about the safety for the crew and passengers.

The main items are;

Safe access;
The vessel should be decently moored alongside.
The propellor(s) must be disengaged during the time alongside.
One should have a safe access to the vessel with a gangway.

Safe working practice:
There must be procedures in place to safeguard that:

The crew wear their Personal Protecting Safety Equipment (helmet, gloves, safety shoes, coverall, and safety goggles) at all times.

The tools on board of a vessel are well maintained and if necessary regular tested and inspected. One should think about chain blocks, shackles (safe working load), or electrical tools.

Jobs that need to be done are explained with the focus on the possible dangers during the project, and how to reduce the dangers before you start the job.

It also means that a safe working practice starts with keeping the vessel in compliance with the SCV code and maintain the vessel in accordance with the code. With special attention for the rescue and firefighting equipment on board.

Small commercial vessel (SCV) safety certificate

A vessel to which the SCV Code applies shall not be operated without having on board a valid SCV Safety Certificate issued by the Administration following a satisfactory inspection.

This certificate shall remain valid for a period not exceeding 1 year for vessels carrying more than 12 passengers on international voyages and not exceeding 5 years for all other vessels from the date of inspection provided that the vessel successfully completes an annual inspection or unless revoked by the Flag state Administration.

B10 Weather

B10.1 Hurricanes

Hurricane warning signs are not apparent until a hurricane has gotten close to making landfall. A few signs, such as an increase in ocean swell, wave frequency and driving rain, can be seen 36 to 72 hours before a hurricane strikes.

Rip tides pushing away from the shoreline can appear as the storm nears. Those who live in areas where hurricanes are likely should create a disaster plan and keep an eye on weather forecasts, particularly during hurricane season, which is June 1 through November 30 in the Atlantic.

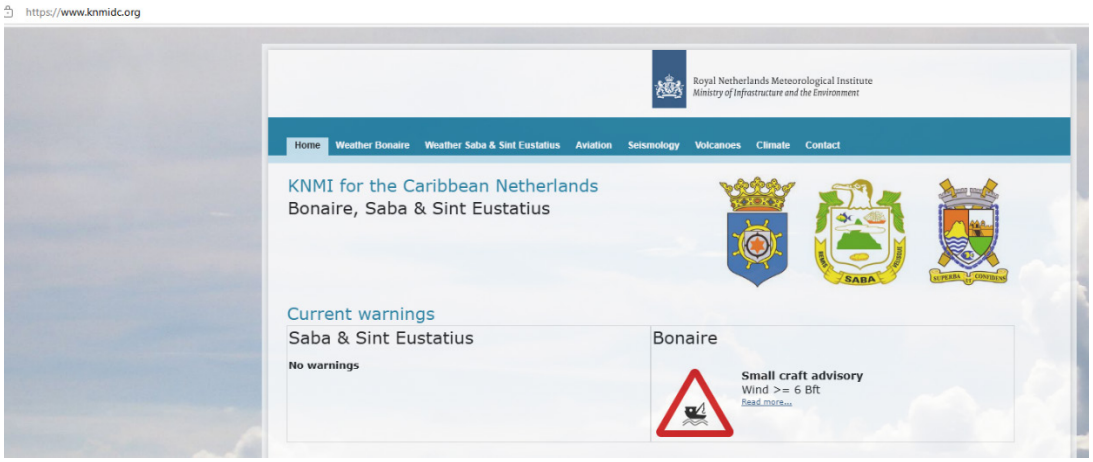
The website of the National Hurricane Center is: www.nhc.noaa.gov

B10.2 Weather forecasts

The website for the local weather on the three BES Islands is: www.knmidc.org

Here you can find the weather for each individual island of Bonaire, St Eustatius and Saba.
Including:

1) the small craft advisor, containing a wind force or sea state warning with the advice to exercise caution
2) Weather forecast
3) Hurricane warnings
4) Current weather



SCV vessels are falling under term "small craft"

Small craft advisory

Wind >= 6 Bft

There is a risk of a strong easterly wind, force 6. Small craft should exercise caution.

The scale of Beaufort is given in the table below.

Beaufort number	Description	Knots	m/s	Wave Height, m	What the sea looks like
0	Calm	0-1	0.0-0.2	0.0	Sea like a mirror
1	Light Air	1-3	0.3-1.5	0.1	Ripples without crests
2	Light Breeze	4-6	1.6-3.3	0.2	Small wavelets
3	Gentle Breeze	7-10	3.4-5.4	0.3-1	Large wavelets
4	Moderate Breeze	11-16	5.5-7.9	1.0-1.5	Small waves
5	Fresh Breeze	17-21	8.0-10.7	1.5-2.5	Moderate waves
6	Strong Breeze	22-27	10.8-13.8	2.5-3.5	Larger waves
7	Near Gale	28-33	13.9-17.1	3.5-5	Sea heaps up
8	Gale	24-40	17.2-20.7	5-6.5	Moderately high waves
9	Strong Gale	41-27	20.8-24.4	6.5-8	High waves
10	Storm	48-55	24.5-28.4	8-10	Very high waves
11	Violent Storm	56-63	28.5-32.6	10-13	Exceptionally high waves
12	Hurricane	≥64	≥32.7	≥14	Phenomenal high waves

Be aware, the related wave heights are for waves on the open ocean, not near the coast. Near the coast the waves built up even higher due to the rising of the seabed.

The weather forecast on this website is for the seas around the islands consists of the following items:

1) Synopsis, this means the pressure pattern, fronts, wind direction and how they will change and evolve over the coming days
2) Weather, indicating the cloudiness and change of rain and/ or showers
3) Visibility
4) Winds
5) Seas

Example given.

KNMI for the Caribbean Netherlands

Weather Saba & Sint Eustatius

Marine Forecast for seas around Saba and Sint Eustatius

Wednesday 04 until Thursday 05 June 2025

Synopsis:
Between a low over Colombia and a high over the Atlantic an easterly flow is maintained.

Weather:
Mostly clear to partly cloudy, with a chance of some isolated showers.

Visibility:
More than 10 km. In a shower risk 4-10 km.

Winds:
Easterly, moderate, occasionally fresh, force 4-5. On Thursday morning decreasing, gentle to moderate, force 3-4.

Seas:
Moderate, 4-6 ft.

B11 Engineering knowledge

Engineering knowledge

For the safety of the vessel, it is important that the vessel engines and equipment are reliable.

Especially for the main engine(s) and possible auxiliary engine(s) or the batteries. To make sure the technical equipment stays reliable; the installations must be maintained.

Check before starting up engines

Each time before you start up an engine you must check the minimum following items:
Is the Lubricating (Lub.) oil level still O.K. from the engine and gearbox?
Is the fresh cooling water level still O.K?
Is the raw water system still in good condition?
Are the seawater valves in the correct position?
Is the raw filter clean?
Is the fuel level O.K. for the intended voyage including spare fuel in case of something happens?
Drain possible water from the fuel tank
Is the V-belt still in good condition?
Are there no leakages around the engine?

Besides the check-ups before starting the engine, one needs to do the maintenance of the engine.
To keep the engine reliable, one should follow the maintenance schedule from the manufacturer of the engine and check the instruction manual.

The description of the maintenance schedule is made on the base of the running hours of the engine. So, this means that it is important to know the amount of running hours from the engine, before you can do proper running hours maintenance. Therefore, it is important to record the starting and stopping time each time the engine is being used in the logbook.

Depending on the engine you can have a

250 running hours maintenance
500 running hours maintenance
etc, etc.

Every time the engine is due for the maintenance one should keep in mind that a 500 running hours maintenance goes together with the 250 running hours maintenance.

For example, in the instruction book of the engine it stated that after 250hr the lub. oil must be changed. For the 500 hrs maintenance it stated that the lub. oil filter must be replaced.

This means that once the engine needs the 500hr maintenance, not only the oil filter must be changed, but the lub. oil as well.

Every technical installation has an instruction manual. One must always follow the instruction from the manufactory to do the maintenance.

In case an emergency situation with an engine arises, the engine needs to be stopped as quickly as possible. In this case you stop the engine outside the engine room (think about a fire in engine room).
This can be done by stopping the engine electrical outside the engine room, or in some cases you need to stop the engine by shutting of the fuel delivery. This fuel valve placed in the fuel delivery line must be able to be operated outside the engine room.

Batteries

There are different kind of batteries.
The older and cheaper batteries are called lead batteries and need to have a regular check up on the liquid level of each cell.

Inside each cell is a mixture of demineralised fresh water with acid.
This acid is a chemical and can damage your hands, and or clothes (use personal protective equipment (PPE’s)

The level of the liquid should be 1 cm below maximum.
the refiling must be done with demineralised fresh water only.

Maintenance free batteries
Today you can buy different types of maintenance free batteries.
These batteries will have an “eye” build in the battery which indicate green, orange, or red.
green: the battery is in good condition.
orange: the battery is becoming worse.
red: the battery is bad and must be renewed.

Troubleshooting

In case after all the maintenance still something happens, one must repair the engine.
This starts with finding out what could be the problem

Most of the instruction books have a troubleshoot list.
Determine if the problem is electrical, fuel related, lubricating related or cooling water related.
This is done by checking what kind of alarm you received.

Electrical related:
Check if the battery is still full.
Check if your starting motor is engaging.
Check if V-belt is still in good condition and still under the correct tension.
Check if your alternator is still charging you battery.

Fuel related:
Check for leakages around the engine
Check the fuel level in the fuel tank
Check the correct positions of all the fuel valves
Check if your fuel pre- and final filters are not clogged

Lubricating oil related:
Check on leakages around the engine
Check the lub. oil level in the engine and or gearbox
Check the correct positions of all the valves in the lubricating lines
Check the lub. oil filter(s)

Fresh cooling water related:
Check on leakages around the engine
Check the cooling water level in the expansion tank
Check the correct positions of the valves in the freshwater cooling system
Check the condition of the V-belt and the tension of the V-belt
Check the freshwater cooling pump
Check your cooling water heat exchanger

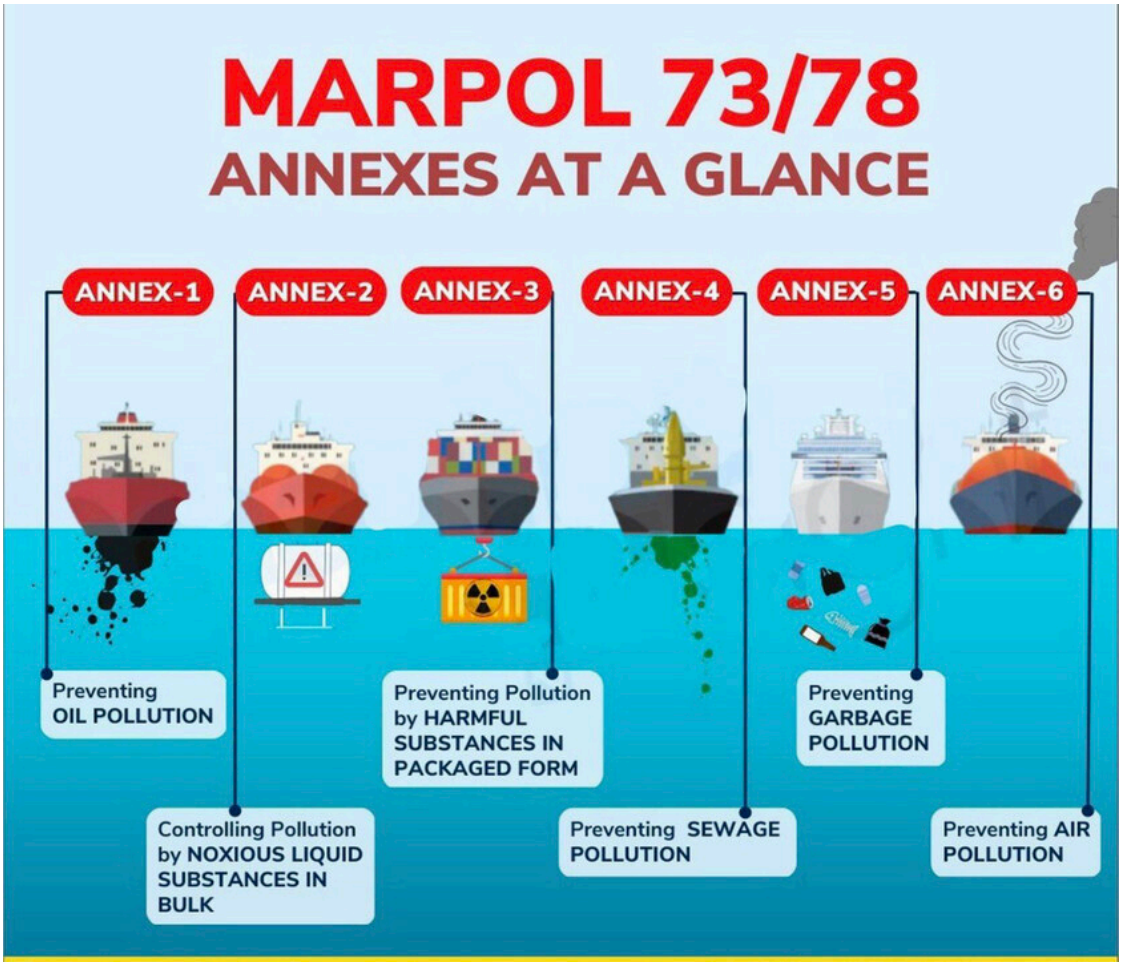
Raw cooling water related:
Check for leakages around the engine
Check your raw water filter(s)
Check the correct positions of the valves in the raw water-cooling system
Check the condition of the V-belt and the tension of the V-belt
Check the raw cooling pump

Once you found the problem, you still need to find a way to repair the problem.
It is impossible to take every item as spare with you on the vessel.
However it makes sense to always have some critical spare parts on board, including a toolbox, A spare set of fuel and lubricating oil filters, a spare impellor for the raw water pump, a spare impellor for the fresh water pump and a V-belt.

In case you need to do an emergency repair while you are at sea.
Do not forget to make a proper repair with the proper spare parts, and bolts, nuts, hose clamps, etc, etc. once you are back in the harbour

B13 Prevention of pollution

The convention to prevent pollution of the seas is called MARPOL and consist of 6 annexes



It is forbidden to pollute the sea with oil, oily water and/ or bilge water, chemicals, sewage, garbage and the air with high Sulphur exhaust gas

Therefore:

Annex I
Always check the bilge before pumping it overboard, no oil or oily water allowed to be pumped into the sea

Marpol Annex I: Control of discharge of oil
Regulation 15:

Any discharge into the sea of oil or oily mixtures from ships shall be prohibited.

Oil and all oily mixtures shall be retained on board for subsequent discharge to reception facilities.

Annex II and III
No chemicals in bulk or dangerous goods in packaged form allowed to be disposed into the sea

Annex IV
Does not regulate the pollution of untreated sewage for small ships < 400 GT and carrying less than 15 persons. That does not mean that you are allowed to pump raw sewage overboard in the harbor or anchorage. Local rule as harbor- or pollution regulations may forbid disposal of untreated sewage.

Annex V
The Caribbean is a so-called special area and disposing of garbage is prohibited except for comminuted food waste > 12 miles from nearest land.
See disposal rules table on the next page.

Annex VI
The fuel used for your engine and/ or generator is not allowed to have a Sulphur content higher than 0,5%. Gasoline, gasoil and marine diesel comply with this regulation but in case of heavy fuel you must make sure, stated on the Bunker Delivery Note (BDN), that the Sulphur content is below 0,5% before bunkering.

MARPOL Annex V Garbage disposal rules, NB Bonaire, St Eustatius and Saba waters are special areas entered into force in March 2018

Garbage type[1]	All ships except platforms[4]		Regulation 5 Offshore platforms located more than 12 nm from nearest land and ships when alongside or within 500 metres of such platforms[4]
	Regulation 4 Outside special areas and Arctic waters (Distances are from the nearest land)	**Regulation 6 Within special areas and Arctic waters** (Distances are from nearest land, nearest ice-shelf or nearest fast ice)	
Food waste comminuted or ground[2]	≥3 nm, en route and as far as practicable	≥12 nm, en route and as far as practicable[3]	**Discharge permitted**
Food waste not comminuted or ground	≥12 nm, en route and as far as practicable	**Discharge prohibited**	**Discharge prohibited**
Cargo residues[5, 6] not contained in washwater	≥ 12 nm, en route and as far as practicable	**Discharge prohibited**	**Discharge prohibited**
Cargo residues[5, 6] contained in washwater		≥ 12 nm, en route and as far as practicable (subject to conditions in regulation 6.1.2 and paragraph 5.2.1.5 of part II-A of the Polar Code)	
Cleaning agents and additives[6] contained in cargo hold washwater	Discharge permitted	≥ 12 nm, en route and as far as practicable (subject to conditions in regulation 6.1.2 and paragraph 5.2.1.5 of part II-A of the Polar Code)	**Discharge prohibited**
Cleaning agents and additives[6] in deck and external surfaces washwater		Discharge permitted	
Animal Carcasses (should be split or otherwise treated to ensure the carcasses will sink immediately)	Must be en route and as far from the nearest land as possible. Should be >100 nm and maximum water depth	**Discharge prohibited**	**Discharge prohibited**
All other garbage including plastics, synthetic ropes, fishing gear, plastic garbage bags, incinerator ashes, clinkers, cooking oil, floating dunnage, lining and packing materials, paper, rags, glass, metal, bottles, crockery and similar refuse	**Discharge prohibited**	**Discharge prohibited**	**Discharge prohibited**

B17 Basic knowledge of vessel construction and stability

Knowledge of the importance of not exceeding vessels load capacity:

The master of a vessel shall never exceed the vessels maximum load capacity. Overloading effects, the freeboard, stability, maneuverability and may lead to sinking or capsizing.

The master needs to have a basic knowledge of vessel construction and stability. Therefore, the following shall be taken into account:

Distribution of passengers
Make sure that the passengers are equally divided over the ship to avoid large heel or trim during the embarkation, disembarkation and voyage.

Be aware of accidents in the past were all passenger moved to one side to take selfies which capsized the vessel with 9 casualties as outcome.

Maximum amount of passengers
The master of the vessel shall never carry more passengers than for which the vessel is certified.

Overloading
The master of a vessel shall never exceed the vessels maximum load capacity.

Overloading effects:
1) it reduces the freeboard which will lead to a faster submerging of the deck which on her turn will lead to a decrease in stability and risk of capsizing and may even lead to sinking

2) the maneuverability

Placing of cargo
The master shall insure that the cargo is equally divided, does not exceed the max deck weight strength values and is stowed as low as possible.
High stacked cargoes have a big negative impact on the stability and need to be avoided at any time.
The master shall avoid heel or trim; the vessel needs to leave port in the upright/ no heel position and with a trim as close as possible to “even keel”

B18 First Aid

First Aid

To obtain a BM3 license you need to be in the possession of a valid medical first aid certificate

With regards to this medical first aid certificate, the certificates of the Red Cross and the World Recreational Scuba Training Council (WRSTC) or similar can be accepted.

Appendix 1

Medical fitness statement

Appendix 1
Format Medical Fitness Statement for Caribbean Netherlands ships engaged on local voyages

1 Details applicant

1.1	Name	
1.2	Address	
1.3	Place	
1.4	Date of birth	
1.5	Identification type/number/country	

2 Statement physician

The undersigned declares that the questionnaire of appendix H of the Regulation Seafarers has been filled in truthfully and that the person involved appears to be medically fit for the position of master on Caribbean Netherlands ships engaged on local voyages

2.1 Name physician	
2.2 BIG number	
2.3 Address	
2.4 Place and date	
2.5 Signature physician	

This statement is valid for three years after signing (Regulation Seafarers article 10.12)

For questions and consultation, you can apply to the marine medical advisor of the Human Environment and Transport Inspectorate (ILT) mas@ilent.nl

Notes:

This statement is for operating local vessels certified under 41B of the regulation Safety Seagoing Vessels and may be used instead of a medical fitness certificate. (Regulation Seafarers Article 10.11)

The model of this statement is based on appendix H of the Regulation Seafarers

Appendix 1
Questionnaire

Questionnaire to be filled in by the examinee together with a physician, of their choice, who is registered under the Dutch Individual Health Care Professions Act (BIG) (for example a family physician or occupational physician)

1	Do you have reduced vision, with or without optical aids, that could affect safe navigation? Seeing with one eye is permitted. *	☐ Yes ☐ No
2	Is your color vision disrupted for the colors red and green?	☐ Yes ☐ No
3	Do you have reduced hearing in one or both ears such that you cannot understand conversational speech, whether or not with a hearing aid, at 2 meters with each ear individually?	☐ Yes ☐ No
4	Is your stamina significantly reduced as a result of a chronic illness, such as heart failure or respiratory illness?	☐ Yes ☐ No
5	Is your ability to concentrate or capacity to hold your attention significantly limited as a result of a chronic illness such as brain injury or recurrent depression?	☐ Yes ☐ No
6	Do you suffer from a chronic illness as a result of which the chance of acute inability to work is elevated, such as cardiac arrhythmia, poorly controlled diabetes, or epilepsy?	☐ Yes ☐ No
7	Do you have a physical limitation as a result of which the normal use of an arm, hand, leg or foot is limited or absent?	☐ Yes ☐ No
8	Do you use alcohol, drugs or other addictive substances to a degree that leads to unsafe behavior?	☐ Yes ☐ No
9	Do you regularly use medication that, according to the leaflet, can affect your driving ability, such as antidepressants, pain killers, sleeping pills and the like?	☐ Yes ☐ No
10	Do you have another condition or physical limitation that could affect safe navigation?	☐ Yes ☐ No

* Note for the physician: the permissible lower limit of visual acuity, with or without optical aids, is 0.8 with both eyes together.

If all the questions are answered with NO, the medical fitness statement can be signed by the physician.

If one or more questions are answered with YES, you must present this to a designated marine medical examiner to assess whether you are still adequate and eligible for a medical fitness certificate for work on board a ship. The costs of visiting the doctor are at your expense.

Annex 1

Annex 1
FORM OF SCV SAFETY CERTIFICATE

[COUNTRY LOGO]	**[COUNTRY NAME]** **SMALL COMMERCIAL VESSELS SAFETY CERTIFICATE** **FOR VESSELS OPERATING IN THE CARIBBEAN TRADING AREA**		
VESSEL NAME	TYPE	CALL SIGN	MMSI
HOME PORT	IDENTITY MARK	POWER (KW)	PROPULSION
PLACE BUILT	DATE BUILT	HULL MATERIAL	LENGTH (M)
OWNER		OPERATOR	

THIS VESSEL SHALL BE MANNED WITH THE FOLLOWING PERSONNEL:

TITLE	MINIMUM GRADE	NUMBER
MASTER		
MATE(S)		
ENGINEER(S)		
DECK RATING(S)		
ENGINEER RATING(S)		

MINIMUM TOTAL SEAFARERS:

THIS VESSEL MAY CARRY_____PASSENGERS PLUS_____SEAFARERS FOR A TOTAL PERSONS ALLOWED OF_____

OPERATING AREA AND CONDITIONS OF OPERATION

MAXIMUM ALLOWABLE TRIM _____MINIMUM FREEBOARD AMIDSHIPS _____

COMPLETION DATE OF THE SURVEY ON WHICH THIS CERTIFICATE IS BASED_____

Issued by:

This Certificate Is Issued Under The Provisions Of The Code Of Safety For Small Commercial Vessels As Applied By *(Insert National Legislation)*

(Authorized signature)

THIS CERTIFICATE SHALL REMAIN VALID UNTIL SUBJECT TO THE ANNUAL SURVEYS BELOW BEING CARRIED OUT WITHIN 3 MONTHS EITHER SIDE OF THE ANNIVERSARY DATE (BASED ON DATE OF EXPIRY) EACH YEAR IN ACCORDANCE WITH **I/16.4**

Authorized stamp

ISSUED AT: ON

ENDORSEMENT FOR ANNUAL SURVEYS

AUTHORIZED NAME & SIGNATURE — AUTHORIZED STAMP

PLACE:

DATE:

AUTHORIZED NAME & SIGNATURE — AUTHORIZED STAMP

PLACE:

DATE:

AUTHORIZED NAME & SIGNATURE — AUTHORIZED STAMP

PLACE:

DATE:

AUTHORIZED NAME & SIGNATURE — AUTHORIZED STAMP

PLACE:

DATE:

Annex 1

Form of SCV Safety Certificate *(Regulation I/16.1)*

VESSEL NAME	IDENTITY MARK		PAGE

RECORD OF LIFESAVING APPLIANCES AND FIREFIGHTING EQUIPMENT

TOTAL EQUIPMENT PROVIDED: MASTER SHALL MAINTAIN DETAILED RECORDS OF SAFETY EQUIPMENT AND SERVICING AS REQUIRED.

LIFEBOATS (TOTAL)		LIFEJACKETS (ADULT)		FIRE PUMPS (FIXED)	
FOR A TOTAL NUMBER OF PERSONS =		LIFEJACKETS (CHILD)		BILGE PUMPS	
RESCUE BOATS (NOT INCLUDED IN LIFEBOAT TOTAL)		LIFEJACKETS (OVERSIZE/ INFANT)		FIRE PUMPS (PORTABLE)	
MEANS OF RECOVERY OF PERSONS FROM WATER		LIFE BUOYS (TOTAL)		FIRE BUCKET (WITH LANYARD)	
THROW OVER INFLATABLE RAFTS		WITH LIGHTS*		FIRE EXTINGUISHERS	
FOR A TOTAL NUMBER OF PERSONS =		WITH LINE ATTACHED*		FIRE HYDRANT	
DAVIT LAUNCHED INFLATABLE RAFTS		OTHER*		FIRE HOSE	
FOR A TOTAL NUMBER OF PERSONS =		HAND HELD DISTRESS FLARE		FRIE HOSE LENGTH	
LIFE FLOATS/BUOYANT APPARATUS		ROCKET DISTRESS FLARE		FIRE BLANKET	
FOR A TOTAL NUMBER OF PERSONS =		ORANGE SMOKE FLARE		FIRE AXE	

* INCLUDED IN TOTAL

FIXED EXTINGUISHING SYSTEMS

SPACE PROTECTED	AGENT	CAPACITY

GPS		EPIRB		ECHO SOUNDER	
RADAR		SART		FIRST AID KIT	
VHF WITH DSC		VHF WITHOUT DSC		SPEED LOG	
MAGNETIC COMPASS		SOUND SIGNAL		RADAR REFLECTOR	
WEATHER INFORMATION RETRIEVAL SYSTEM		GMDSS SAT'C'		ANCHORS	
PUBLIC ADDRESS SYSTEM					
CHARTS (DETAIL)					
NAUTICAL PUBLICATIONS (DETAIL)					

EQUIVALENCIES

EXEMPTIONS

REMARKS

DRY DOCKING, HULL AND TAILSHAFT EXAMINATIONS IN ACCORDANCE WITH I/10.1

DRY DOCK…	IN WATER…	DRY DOCK…	IN WATER…	DRY DOCK…	IN WATER…	DRY DOCK…	IN WATER…
HULL…	T/SHAFT…	HULL…	T/SHAFT…	HULL…	T/SHAFT…	HULL…	T/SHAFT…
LOCATION:		LOCATION:		LOCATION:		LOCATION:	
DATE:		DATE:		DATE:		DATE:	

REPAIRS, ALTERATIONS AND MODIFICATIONS:

Annex 2

Study book subjects

Subjects	**Done on; date to be filled in**
Emergency situations	
Regulations for preventing collision at sea	
Local knowledge and regulation	
Seamanship	
Distress signals	
Passenger safety	
Legal responsibilities towards passengers and seafarers	
Weather	
Engineering Knowledge	
Prevention of pollution	
Basic knowledge of vessel construction and stability	

Annex 3

Annex 3

Boat Handling

Subject	**Positively assessed by owner or captain on, date to be filled in.**
Berthing and unberthing	
Coming to and weighing Anchor	
Making fast to and leaving a buoy	
Boat manoeuvring in confined waters	
Turning short round	
Knowledge and effect of transverse thrust	
Steering a compass course and taking a rough bearing	
Demonstration on the use of the VHF *	

* The holder must have knowledge of procedures used in radio telephone (VHF) communications particularly with respect to distress, urgency, safety and navigational messages and of the effect of misuse of such equipment

=== End ===