# AUTORIDAD DEL CANAL DE PANAMA

## **ACP**

AUTORIDAD DEL CANAL DE PANAMA FOR



**Smithsonian Tropical Research Institute** 

# Curso Preparatorio para Licencia de Operador de Embarcaciones Menores de 20 Metros (65 pies)

### Noviembre 2000

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# PART I APPLICABILITY OF SECTIONS AND DEFINITIONS

**A.** Applicability - These sections apply to vessels and seaplanes en the navigable waters of the Canal. The provisions of this part apply to navigable waters between a line connecting the East Breakwater Light and the West Breakwater Light at the Atlantic entrance to the Canal and a line passing through Bouys 1 and 2 and San Jose Rock at the Pacific entrance to the Canal, joining stations 72( 8° 52' 49.60" latitude; 79° 32' 25.50" longitude), and 86 (8° 54' 19.71" latitude;

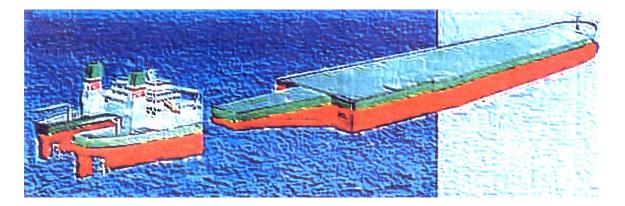
79° 31' 09.91" longitude) at the Canal operation compatibility area boundary line

The Sections of the International Regulations for Preventing Collisions at Sea, 1972 (72 COLREGS) shall apply in Canal waters to serward of these boundary lines

#### **B.** Definitions

- 1. Vessel: Includes every description of water craft, including non-displacement craft and seaplanes used or capable of being used as means of transportation on water.
- 2. Power-driven Vessel: Means any vessel propelled by machinery
- **3.** Sailing Vessel: Means any vessel under sali, provided that propelling machinery, if fitted, is not being used.
- **4. 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 maneurability.
- **5. Seaplane:** Includes any aircraft designed to maneuver on the water.
- **6. Vessel Not Under Command:** Means a vessel which, through some exeptional circumstance, is unable to maneuver as required by this chapter, and is therefore unable to keep out of the way of another vessel.
- 7. 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 this chapter and is therefore unable to keep out of the way of another vessel. This term includes, but is not limited to:
  - a. A vessel engaged in laying, servicing, or picking up a navigation mark, submarine cable or pipeline.
  - b. A vessel engaged in dredging, hydrigraphic or oceanographic work, or underwater operations.
  - c. A vessel engaged in al towing operation that severely restricts the towing vessel and her tow in their ability to deviate from their course.

- **8.** Under Way: Means that a vessel is not at anchor, or made fast to the shore, or aground.
- 9. Length and Breadth: Means the vessel's length overall, and greatest breadth
- **10.** Vessel in sight of each other: Vessels shall be deemed to be in sight of one another only when one can be observed visually from the other.
- **11. Restricted Visibility:** Means any condition in which visibility is restricted by fog, mistm haeavy rainstrorm, or any other similar causes.
- **12. Motorboat:** Means a power-driven vessel 20 meters (65 feet) in length or less except tugboats and towboats, and includes all vessels or boats equiped with a detachable motor. Any motorboat under power, whether under sail or not, is to be considered a motorboat
- 13. Pilot Vessel: A vessel engaged in pilotage duty.
- **14. Barge-Tank:** Defined as a tank vessel without self propulsion.
- **15. Vissible:** When applied to lights, means visible on a dark night with clear atmosphere.
- **16.** Composite Unit: A pushing vessel that is rigidly connected by mechanical means (other than lines, hawsers wires or chains) to a vessel being pushed ahead, so they react to sea and swell as one vessel.



**Composite unit** 

#### PART II STEERING AND SAILING RULES

#### Conduct of vessels in any condition of visibility

#### A. Lookout

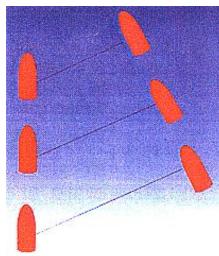
- 1. Every vessel shall at all times while under way in the Canal and adjacent waters, maintain a proper lookout by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions, so as to make a full appraisal of the situation, and of the risk of collision
- 2. The person acting as lookout shall have no other assigned duties, and shall report inmediately all relevant and material information to the person in charge of navigation of the vessel.

#### B. Safe Speed.

- 1. 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.
- 2. In determaining a safe speed, the following factors, ammong others, shall be taken into account:
  - a. The state of visibility
  - b. The traffic density, including concentrations of small crafts or any other vessels.
  - c. The maneuverability of the vessel, with special reference to stopping distance, and turning ability in the prevailing conditions.
  - d. At night the presence of backgroung light, such as from shore lights, or from backscatter of her own lights.
  - e. The state of the wind, sea, and current, and proximity of hazards to navigation.

#### C. Risk of Collision.

1. Every vessel shall use all available means appropriete to the prevailing circumstances and conditions, to determine if risk of collision exist. If there is any doubt, such risk shall be deemed to exist.



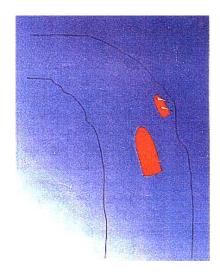
- 2. Proper use shall be made of radar equipment, if fitted and operational. Assumtions shall not be made on the basis of scanty information, specially scanty radar information.
- 3. In determining if risk of collision exist the following considerations shall be among those taken into account:
- a. It shall be deemed that there is a risk of collision if the compass bearing or an approacing vessel does not appreciably change.
- b. In some cases, such risk may exist even when an appreciable bearing change is evident, particularly when approaching a very large vessel or a tow, or when approaching a vessel at a close range.

#### D. Maneuvers to Avoid Collision.

- 1. If permited by the circumstances of the case, any maneuver to avoid collision shall be clear, made in ample time, and with due regard to the observance of good seamanship.
- 2. If permitted by the circumstances of the case, any alteration of course and/or speed to avoid collision shall be large enough to be readily apparent to another vessel observing visually or by radar. A succession of small alterations of course and/or speed shall be avoided.
- 3. If there is sufficient sea room, alteration of course alone may be most effective action to avoid a close-quarters situation, provided that it is made in good time is substancial and does not result in another close quarters situation.
- 4. Any maneuvers to avoid collision with another vessel shall be such as to result in passing at a safe distance. The efectiveness of the maneuver shall be carefully checked until the other vessel es finally past and clear.
- 5. If necessary to avoid collision, or allow more time to assess the situation, a vessel shall slacken her speed or take all way off by stopping or reversing her means of propulsion.
- 6. When two vessels are proceeding in such directions as to involve risk of collision, a power-driven vessel, motorboat, or sailing vessel that is entering or preparing to enter the main channel of the Canal from either side, shall not cross the bow of a vessel proceeding in either direction along the Canal axis, and shall keep clear until the vessel proceeding along the Canal axis has passed.

#### E. Narrow Channels.

- 1. A vessel proceeding along the course of a narrow channel or fairway shall keep as near to the outer limit of the channel or fairway which lies on her starboard side, provided this can be done safely.
- 2. A vessel less than 20 meters (65 feet) in length, or a sailing vessel shall not impede the passage of a vessel which can safely navigate only within a narrow channel or fairway

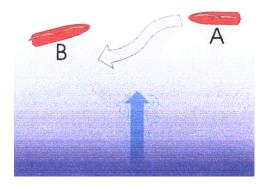


- 3. A vessel engaged in fishing shall not impede of any other vessel navigating within a narrow channel or fairway.
- 4. A vessel shall not cross a narrow channel or fairway if such crossing impedes the pasage or a vessel which can safely navigate only within such channel or fairway. The latter vessel shall use the danger signal prescribed later, if in doubt as to the intention of the crossing vessel.
- 5. In a narrow channel or fairway, the vessel intending to overtake shall indicate her intention by sounding the appropriate acoustic signal prescribed in Part IV. The overtaken vessel, if in agreement, shall sound the appropriate signal. If in doubt, she shall sound the danger signal.
- 6. These provisions do not releive the overtaking vessel of her obligation under these parts.
- 7. A vessel nearing a bend, or an area of narrow channel or fairway. Where other vessels may be obscured by an intervening obstruction, shall navigate with alertness and caution
- 8. Vessel shall avoid anchoring in a narrow channel, if permitted by the circumstances of the case.
- 9. When two power-driven vessels are meeting end on, or nearly end on in the Canal, and in the vicinity of an obstruction, e.g., a dredge, drill barge slide, etc., the vessel whole side of the Canal is clear shall have the right-of-way, and the other vessel shall hold back and keep out of the way, until the privileged vessel is clear.

#### **Conduct of Vessels in Sight of One Another**

The following sections (from F to L ) shall apply only to vessels in sight of one another

#### F. Sailing Vessels

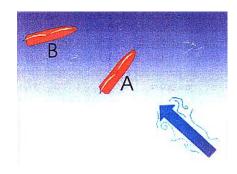


Sailing vessel A shall keep out of the way of sailing vessel B

- b. When both have the wind on the same side, the vessel which is to windward shall keep out of the way of the vessel which is to leeward
- B

Vessel A must stay away from vessel B

- 1. Then two sailing vessels are approaching one another, so as to involve risk of collision, one of them shall keep out of the way of the others als follows:
  - a. When each has the wind on a different side, the vessel which has the wind on the port side shall keep out of the way of the other.



Sailing vessel A shall keep out of the way or sailing vessel B

c. If a vessel with the wind on the port side sees a vessel to windward, and cannot determine with certainty whether the other vessel has the wind on the port or on the starboard side, shall keep out of the way of the other.

2. The windward side shall be deemed to be the side opposite to that on which the mainsail is carried or, in the case of a square-rigged vessels, the side opposite to that on which the largest fore-and-aft sail is carried.

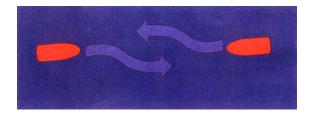
#### G. Overtaking

- 1. Notwithstanding the provisions contained in the paragraphs of this section, any vessel overtaking any other shall keep out of the way of the overtaken vessel, except that within the Canal channel, all pleasure vessels and crafts, even though they are an overtaken vessel, shall keep out of the way of transiting vessels, and Panama Canal Authority floating equipment.
- 2. A vessel shall be deemed to be overtaking when coming up with another vessel from a direction more than 22.5 degrees abaft her beam that is in such a position with reference to the vessel she is overtaking that at night she would be able to see only the stern light of that vessel, but neither of her sidelights.
- 3. When a vessel is in any doubt at to whether she is overtaking another, she shall assume that this is he case, and act accordinly.
- 4. Any subsequent alteration of the bearing between the two vessels shall not make the overtaking vessel a crossing vessel with the meaning of this chapter, not relieve her of the duty of keeping clear or the overtaken vessel, until shes is finally past and clear.

#### H. Head-on-Situation

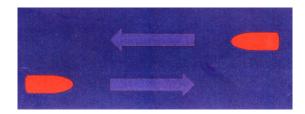
- 1. When two power-driven vessels are meeting on reciprocal or nearly reciprocal cources, so as to involve risk of collision, each shall alter her course to starboard, so that each pass on the port side or the other.
- 2. Such a situation shall be deemed to exist when a vessel sees the other ahead, or nearly ahead, and by night she could see the masthead lights of the other in a line or nearly ina a line, and/or both sidelights and by day she observes the corresponding aspect of the other vessel.
- 3. When a vessel is in doubt as to whether such a situation exists, she shall assume that it does exist and act accordingly
- 4. In the Canal channel, every power-driven vessel encountering another vessel while proceeding along the line of the channel, shall keep to that side of the fairway or mid-channel which lies on its starboard side
- 5. Tugs and motorboats shall, whenever practicable, keep well over to that side of the Canal which is to their starboard when large vessels are passing.

First Situation
Meeting End on or nearly End on



The red and green sidelights of each vessel are visible to the other. Vessels exchange the one short blast whistle signal, each vessel alters course to starboard and they pass port to port

**Second Situation Passing Port to Port** 



Here only the red sidelight is visible to each vessel proper screening preventing the green sidelights from being seen across the bow. Vessels exchange the one blast signal and pass port to port without change of course.

Third Situation
Passing Starboard to Starboard

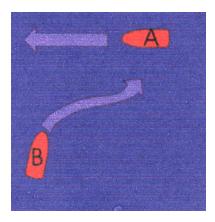


In this situation and with proper screening only the green sidelights are visible to each vessel. The two short blast whistle signal is exchanged and the vessels pass starboard to starboard without altering course.

**Note:** In the three meeting situations describe above, neither vessel is permited to alter course to port in order to effect a starboard passage.

#### I. Crossing Situation

When two power-driven vessels are crossing so as to involve risk of collision, 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 permit, avoid crossing ahead of the other vessel.



Approaching at right angles or obliquely with risk of colision. The vessel "A" having the other vessel "B" to port has the right of way and shall hold her course and speed; she shall indicate such action by the signal of one short blast on the whistle. The vessel "B" having the other vessel "A" to starboard is the burdened vessel and shall stop or slow down and alter course to starboard in order to pass under the stern of vessel "A" and shall indicate such action by sounding on short blast on the whistle.

Note: The whistle signals indicating a change in course are mandatory and should be exchanged while vessels are a reasonable distance apart, a reasonable distance being considered as not less than one half mile.

#### J. Maneuvering by Give-Way Vessel

Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear.

#### K. Maneuvering by Stand-On Vessel

- 1. When one of the vessel is to keep out of the way of the other, the latter shall keep her course and speed. However, the latter vessel may take action to avoid collision by her maneuver alone, as soon as it becomes apparent to her that the vessel requiered to keep out of the way is not taking appropriate action to comply with this section.
- 2. When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by action of the give-way vessel alone, she shall take such action, as will best aid to avoid collision
- 3. A power-driven vessel which takes action in a crossing situation in accordance with paragraph 2 of this section to avoid collision with another power driven vessel on her own port side.
- 4. This section does not relieve the give-way vessel of her obligation to keep out of the way.

#### L. Responsabilities between types of vessels

- 1. Except where sections E and G otherwise require, a power-driven vessel under way shall keep out or the way of:
  - a. A vessel not under command.
  - b. A vessel restricted in her ability to maneuver

- 2. A sailing vessel under way shall keep out of the way of:
  - a. A vessel not under command.
  - b. A vessel restricted in her ability to maneuver.
  - c. A power-driven vessel, except a motorboat.
- 3. In general, a seaplane on the water shall keep well clear of all vessels, and avoid impeding their navigation. However, if there is risk of collision, she shall comply with Sections A through L.
- 4. Panama Canal floating equipment at work in a stationary position shall have a privileged right to such position, and no passing vessel shall four such equipment or its moorings, or pass at such speed as to create a dangerous wash or wake.
- 5. Floating equipment of the Canal from which divers are working, and floating equipment so moored, and vessels under repair and in such condition that a high wash might cause swamping or be hazardous to the workmen, shall be passed by all vessels at a speed sufficiently slow as not to create a dangerous wash or wake.

#### M. Conduct a Vessel in Restricted Visibility

- 1. Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel shall have her engines ready for inmediate maneuver.
- 2. Every vessel shall have due regard to the prevailing circumstances and conditions of restricted visibility when complying with sections A through L
- 3. Except where it has been determined that a risk of collision does not exist, every vessel which hears apparently forvard of her beam the fog signal of another vessel, or which cannot avoid a close-quarters situation with another vessel forward of her beam, shall reduce her speed to the minimum at which she can be kept on her course. She shall if necessary, take all her way off, and in any event navigate with extreme caution until the danger of collision is over.

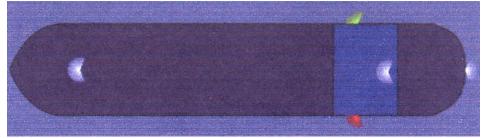
#### PART III LIGHTS AND SHAPES

#### A. Aplication

- 1. The lights prescribed are required in all weather conditions.
- 2. The sections concerning lights shall be complie with from sunset to sunrise, and during such times, no other lights shall be exhibited, escept such lights as cannot be mistaken for the lights specified in this part, or do not impait their visibility or distinctive character or interfere with the keeping of a proper lookout
- 3. The lights prescribed by these sections, if carried, shall also be exhibited from sunrise to sunset in restricted visibility, and my be exhibited in all other circumstances when it is deemed necessary.
- 4. The sections concerning shapes shall be complied with by day.

#### **B.** Definitions

- 1. Masthead Light: A white light placed over the fore and aft centerline of the vessel showing an unbroken light over the arc of the horizon of 225 degrees, and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam, on either side of the vessel.
- 2. Sidelights: A green light on the starboard side, and a red light on the port side, each showing an unbroken light of the horizon of 112.5 degrees, and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on its respective side. In a vessel less than 20 meters (65 feet) in length, the sidelights may be combined in one lantern carried on the fore and and aft center line of the vessel.

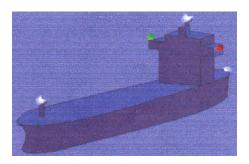


- 3. Stern Light: A white light placed as nearly as practicable at the stern, showing an unbroken light over an arc of the horizon of 135 degrees, and so fixed as to show the light 67.5 degrees from the stern, on each side
- 4. Towing light: A yellow light, having the same characteristics as the stern light defined above.

- 5. All-round Light: A light showing an unbroken light over an arc of the horizon of 360 degreees.
- 6. Flashing Light: A light flashing at regular intervals at a frequency of 120 flashes or more per minute

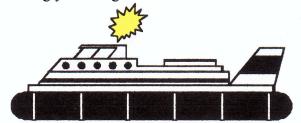
#### C. Power-driven vessels undervay

- 1. A power-driven vessel underway shall exhibit
  - a. A masthead light
  - b. A second masthear light abaft of and higher than the forward one; except that a vessel of less than 50 meters in length shall not be obliged to exihibit such light, but may do so
    - a. Sidelights.
    - b. A stern light.



Vessel less than 50 meters in lenght

7. An air-cushion vessel, when operating in the non-displacement mode shall, in addition to the lights prescribed above exhibit an all-round flashing yellow light.



8. A power-driven vessel of less than 12 meters in length may, in lieu of the lights prescribed in a paragraph is of this section, exhibit an all-round white light and sidelights.



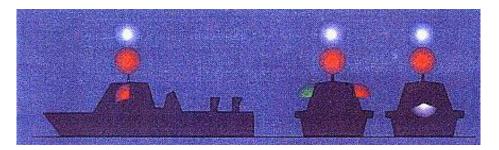
9. A power-driven vessel of less than 7 meters in length, and whose maximum speed does not exceed 7 knots may, in lieu of the lights

- prescribed in paragraph 1 of this section, exhibit an all-round white light, and shall, if practicable, also exhibit sidelights.
- 10. The masthead light or all-round white light on a power-driven vessel of less than 12 meters in length may be displaced from the fore and aft centerline of the vessel, if centerline fitting is not practicable, provided that the sidelights are combined in one lantern which shall be carried on the fore and aft centerline of the vessel, or located as nearly as practicable in the same fore and aft line as the masthead ight or the all-round white light.
- 11. A vessel employed in the transportation or transfer of flamable, explosive, toxic, or radioactive commodities shall carry, in addition to her appropriate mooring, anchor, or navigation lights, where it can best be seen, a red all-round light, of such a character as to be visibleat a distance of at least 2 miles. By day, shall display, where it can best be seen, a red flag if the cargo includes flamable or explosive commodities, and the international single flag signal "T", if the commodity is toxic or radioactive only



#### D. Pilot Vessel.

- 1. A vessel engaged on pilotage duty shall exhibit:
  - a. At or near the masthead, two all-roud lights in a vertical line, the upper being white and the lower red. When underway, sidelights and a stern light.



- b. When at anchor, in addition to the lights prescribed in paragrah 1 (a) of this section, the light, lights or shapes prescribed for vessels at anchor
- c. The International Flag "H" (Hotel) flying at or near the masthed.

2. A pilot vessel, when not engaged on pilotage duty, shall exhibit the lights or shapes prescribed for similar vessels of her length.

#### E. Seaplanes.

Where it is impracticable for a seaplane to exhibit lights and shapes of the characteristics or in the positions prescribed in the sections, she shall exhibit lights and shapes as closely similar in characteristics and position as possible

#### F. Vessels Towing and Pushing

- 1.A power-driven vessel when towing shall exhibit:
  - a. Two masthead lights in a vertical line. When the length of the tow, measuring from the stern of the towing vessel to the after end of the to, exceeds 200 meters, it shall exhibit three such lights in a vertical line.
  - b. Sidelights.
  - c. A stern light
  - d. A towing light in a vertical line above the stern light.



A vessel towing when the length of the Tow is 200 meters of less

A vessel towing when the length of the tow is more than 200 meters

- e. When the length of the tow exceeds 200 meters, a diamond ♦ shape where it can be best seen.
- 2. When a pushing vessel and a vessel being pushed ahead are rigidly connected in a composite unit, they shall be regarded as: a power-driven vessel and shall exhibit the lights prescribed in this section.
- 3. A power-driven vessel, when pushing ahead or towing alongside, except in the case of a composite unit, shall exhibit:
  - a. Two masthead lights in a vertical line.
  - b. Sidelights
  - c. A stern light



Power-driven vessel pushing ahead

#### Power-driven vessel towing alongside



- 4.A vessel or object being towed shall exhibit:
  - a. Sidelights,
  - b. A stern light,
  - c. When the length of the tow exceeds 200 meters, a diamond Shape where it can be seen. ◆





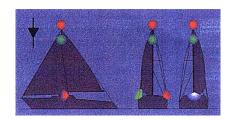
- 5. Vessels being towed alongside or pushed in agroup shall be lighted as one vessel:
  - a. A vessel being pushed ahead, not being part of a composite unit, shall exhibit sidelights at the forward end.
  - b. A vessel being towed alongside, shall exhibit a stern light and sidelights at the forward end.
- 6.An inconspicous, partly submerged vessel or object or combination of such vessels or objects being towed, shall exhibit:
  - a. If it is less than 25 meters in breadth, one all —round white light at or near the forward end and one at or near the after end, except that dracones need not exhibit a light.
    - b. If it is 25 meters or more in breadth, two additional all-round white lights at or near the extremities of its breadth.
  - c. If it exceeds 100 meters in length, additional all-round lights between the lights prescribed in paragraphs 6(a), so that the distance between the lights shall not exceed 100 meters
  - d. A diamond shape at or near the aftermost extremity of the last vessel or object being towed, and if the length of the two exceeds 200 meters, an additional diamond shape where it can best be seen, and located as far forward as is practicable.

#### G. Sailing Vessels Under Way and Vessels Under Oars

- 1. A sailing vessel under way shall exhibit:
  - a. Sidelights
  - b. A stern light.
  - 3. In a sailing vessel less than 20 meters (65 feet) in length, the lights

prescribed in paragraph 1 may be combined in one lantern, carried at or near the top mast, where it can best be seen.

3. A sailing vessel under way may, in addition to the lights prescribed in paragraph 1, 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 prescribed in this section.

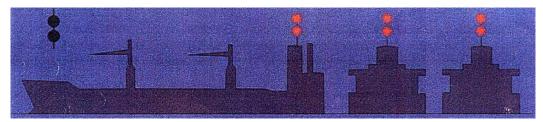


- 4. A sailing vessel of less than 7 meters in length shall, if practicable, exhibit the lights prescribed in paragraph 1 or 2, but if she does not, she shall have ready at hand an electric torch or lighted lantern, showing a white light, which shall be exhibit in sufficient time to prevent collision.
- 5. A vessel under oars may exhibit the lights prescribed in this section for sailing vessels, but if she does not, she shall shall have ready at hand an electric torch or lighted lantern, showing a white light, in sufficient time to prevent collision.
  - 6. A vessel proceeding under sail, when also being propelled by machinery, shall exhibit forward where it can best be seen, a conical shape, apex downwards.

#### H. Vessels Not Under Command or Restricted in their Ability to Maneuver.

A vessel not under command shall exhibit:

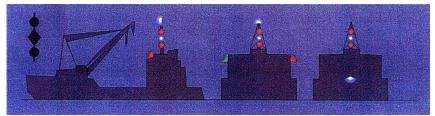
 a.Two all-round red lights in a vertical line, where they can best be seen.
 b.Two balls or similar shapes in a vertical line, where they can best be seen.
 c.When making way trough the water, in addition to the lights prescribed in paragraph 1 (a), sidelights and the stern light.



Vessel not under command not making way

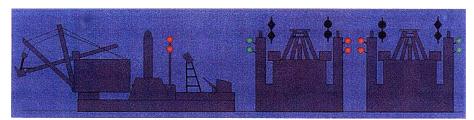
Vessel not under command and making way

- 2.A vessel restricted in her ability to maneuver shall exhibit:
  - a. Three all-round lights in a vertical line, where they can best be seen. The highest and the lowest of these lights shall be red, and the middle light shall be white.
  - b. Three shapes in vertical line, where they can best be seen. The highest and lowest of these shapes shall be balls, and the middle one a diamond.
  - c. When making way through the water, mastheadlight or lights, sidelights, and stern light, in addition to the lights prescribed in paragraph 2(a) of this section.



Vessel restricted in her ability to maneuver, making way

- d. When at anchor in addition to the lights or shapes prescribed in paragraphs 2(a) and (b), the light, lights or shapes prescribed in Section I.
- 3.A vessel engaged in a towing operation that severely restricts the ability of the towing vessel and her tow in their ability to deviate from their course, shall, in addition to the lights and shapes prescribed in paragraphs 2(a) and (b) of this section, exhibit the light or shapes prescribed in Section F, paragraph 1
- 4.A vessel engaged in dredging or underwater operations, when restricted in her ability to maneuver, shall exhibit the lights and shapes prescribed in paragraph 2(a), (b), and (c) of this section, and in addition, when an obstruction exists, shall exhibit:
  - a. Two all-round red lights, or two balls in a vertical line to indicate the side on which the obstruction exists.
  - b. Two all-round green lights, or two diamonds on a vertical line to indicate in which another vessel may pass.



Vessel engaged in dredging operations

- c. When at anchor, the lights or shapes prescribed in this paragraph instead of the lights or shapes prescribed in Section I.
- 5. Whenever the size of the vessel engaged in diving operations makes it

impracticable to exhibit all lights and shapes prescribed by paragraph 4 of this section, the lights and shapes prescribed to diving operations shall be exhibited.

a.A revolving red light where it can best be seen.

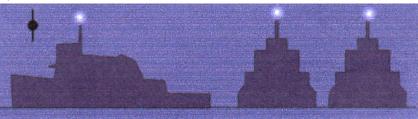
b.A rigid replica of the International Code Flag "A" not less than a meter in height. Measures shall be taken to ensure all-around visibility.



6. Vessels of less than 12 meters in length, except those engaged in diving operations, shall not be required to exhibit the lights or shapes prescribed in this section.

#### I.Anchored Vessels and Vessels Aground.

- 1.A vessel at anchor shall exhibit, where it best can be seen:a.In the forepart, an all-round white light or one ball.b.An additional all-around white light at or near the stern and at a lower level than the forward all-round white light.
- 2.A vessel of less than 50 meters in length, may exhibit an all-round white light where it can be best seen, instead of the lights prescribed in paragraph 1 of this section.



Vessel of less than 50 mts. In length at anchor

3. A vessel at anchor may, and a vessel of 100 meters and more in length shall, also use the available woeking or equivalent lights to illuminate her decks.



Vessels of more than 100 mts in length at anchor

- 4. A vessel aground, in addition to the lights prescribed in paragraph 1 or 2 of this section, shall exhibit, where they can best be seen:
  - a. Two all-round red lights in a vertical line.
  - b. Three balls in a vertical line.

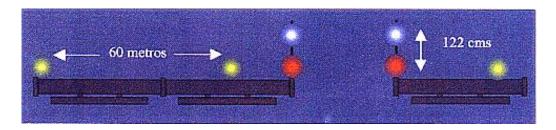


Vessel aground

- 5. A vessel of less than 7 meters in length, when at anchor, not in or near a narrow channel, fairway or anchorage, or where other vessels normally navigate, is not required to exhibit the lights or shapes prescribed in paragraphs 1 and 2 of this section.
- 6. A vessel of less than 20 meters (65 feet), when aground, shall not be required to exhibit the lights or shapes prescribed in paragraphs 4 (a) and (b) of this section except those engaged in diving operations.
- 7. Vessels less than 20 meters (65 feet) in length, when at anchor in any special anchorage designated by the Authority for such vessels, shall not be required to carry or exhibit the lights or shapes specified in this section.

#### J. Marking of Pipeline Laid in Navigable Waters.

Whenever a pipeline is laid in navigable waters, it shall be marked at **n**ight by amber lights, at intervals of 60 meters (200 feet). The lights marking the limits of the gate shall be a vertical display of a white and a red light, the white light to be at least 122 centimeters (4 feet) above the red light. These lights shall be so constructed as to show all around the horizon, and be visible from a distance of at least 1 mile.



#### PART IV SOUND AND LIGHT SIGNALS.

#### A. Definitions.

- 1. Whistle. Means any sound-signaling appliance, capable of producing the prescribed blasts, and which complies with the specifications in Annex III to the 72 COLREGS.
- 2. Short Blast. Means a blast of about one second's duration. •
- 3. **Prolonged Blast.** Means a blast of from four to six second's duration.

#### B. Maneuvering and Warning Signals.

- 1. When power-driven vesseis are in sight of one another, and meeting or crossing at a distance within haif a mlle of each other, each vessel under way, when maneuvering as authorized or required, shall indicate that maneuver by the following signals on her whistle:
  - a. One short blast to mean, I intend to leave you on myport side; •
  - b. Two short blasts to mean, I intend to leave you on my starboard side; ••
  - c. Three short blasts to mean, I am operating astern propulsion; •••
- 2. Upon hearing the one or two blast signals of the other, shall, if in agreement, sound the same whistle signal, and take the steps necessary to effect a safe passing. However, if the vessel doubts the safety of the proposed maneuver, she shall sound the danger signal (at least five short and rapid blasts on the whistle •••••) and each vessel shall take appropriate precautionary action, until a safe passing agreement is made.
- 3. A vessel may supplement the whistle signals prescribed using the following light signals:
  - a. One flash to mean, I intend to leave you on my port side; 🌣
  - b. Two flashes to mean, I intend fo leave you on my starboard side; and 🌣 🌣
  - c. Three flashes to mean, I am operating astern propulsion.
  - 4. The duration of each flash shall be about one second, the interval between flashes shall be about one second, and the interval between successive signals shall be not less than ten seconds.
  - 5. The light used for this signal, if fitted, shall be an all-round white light, visible at a minimum range of 5 miles.

- 6. When in sight of one another a power-driven vessel intending to overtake another vessel shall indicate her intention by the following whistle whistle signals:
  - a. One short blast to mean, I intend to overtake you on your starboard side; •
  - b. Two short blasts to mean, I intend to overtake you on your port side; •
- 7. The power-driven vessel about to be overtaken shall, if in agreement, sound a similar sound signal. If in doubt, she shall sound the danger signal (at least five short and rapid blasts on the whistle).
- 8. When several vessels in sight of one another are approaching each other, and for any reason, one vessel fails to understand the intentions or actions of the other, or is in doubt whether sufficient action is being taken by the other to avoid collision, the vessel in doubt shall immediately indicate such doubt by giving at least five short and rapid blasts on the whistle. This acoustic signal may be supplemented by a light signal of at least five short and rapid flashes.
- 9. If whistles are fitted on a vessel at a distance apart of more than 100 meters, one whistle only shall be used for giving maneuvering and warning signals.
- 10. When a power-driven vessel is leaving a dock or berth, she shall sound one prolonged blast.
- 11. A vessel that reaches agreement with another vessel in a meeting, crossing, or overtaking situation by using radiotelephone on the customary frequencies, is not obliged to sound the prescribed whistle signals, but may do so. If agreement is not reached, then whistle signals shall be exchanged in a timely manner, and shall prevail.
- 12. When a power-driven vessel or motorboat is approaching a pipeline obstructing the channel, and desires to pass through the gate, she shall give a signal of two blasts, namely, one prolonged blast followed by a short blast • , which signal shall be promptly answered by the gate tender with the same signal, if she is ready to have the approaching vessel pass, or by the danger signal • •, if it is not safe for her to pass. In no case shall the approaching vessel attempt to pass until the gate tender signifies by a signal of one prolonged and one short blast that the channel is open. The gate tender shall so signify as soon as practicable, and the approaching vessel shall answer with a similar signal.

#### C. Sound Signals in Restricted Visibility.

In or near an area of restricted visibility, whether by day or night, the signals prescribed in this section shall be used as follows:

1. A power-driven vessel making way through the water shall sound at intervals of not more than 2 minutes one prolonged blast.

- 2. A power-driven vessel under way, but stopped, and making no way through the water, shall sound at intervals of not more than 2 minutes two prolonged blasts in succession, with an interval of about 2 seconds between them.
- 3. A vessel not under command, a vessel restricted in her ability to maneuver, a sailing vessel, and a vessel engaged in towing or pushing another vessel shall, instead of the signals prescribed in paragraph 1 or 2 of this section, sound at intervals of not more than 2 minutes three blasts in succession, namely one prolonged, followed by two short blasts.
- 4. A vessel restricted in her ability to maneuver, when carrying out her work at anchor, shall, instead of the signals prescribed in paragraph 7 of this section, sound the signal prescribed in paragraph 3 of this section.
- 5. A vessel towed or if more than one vessel is towed, the last vessel of the tow, if manned, shall sound four blasts m succession, namely one prolonged, followed by three short blasts. When practicable, this signal shall be made immediately after the signal made by the towing vessel.
- 6. When a pushing vessel and a vessel being pushed ahead are rigidly connected in a composite unit, they shall be regarded as a power-driven vessel, and shall give the signals prescribed in paragraph 1 or 2 of this section.
- 7. A vessel at anchor shall, at intervals of not more than one minute, ring the bell for about 5 seconds. In a vessel of 100 meters or more in length, the bell shall be sounded in the forepart of the vessel, and immediately after the ringing of the bell, the gong shall be sounded rapidly for about 5 seconds in the after part of the vessel. A vessel at anchor may, in addition, sound three blasts in succession, namely one short, one prolonged, and one short blast, to give warning of her position, and of the possibility of collision to an approaching vessel.

8. A vessel aground shall give the bell signal, and if required, the gong signal prescribed in paragraph 7 of his section. In addition, it shall give three separate and distinct strokes on the bell, immediately before and after the rapid ringing of the bell. A vessel aground may, in addition, sound an appropriate whistle signal.

- 9. A vessel of less than 12 meters in length shall not be obliged to give the above mentioned signals, but if she does not, shall make some other efficient sound signal at intervals of not more than 2 minutes.
- 10. A pilot vessel, when engaged on pilotage duty, may, in addition to the signals prescribed in paragraphs 1, 2, or 7 of this section, sound an identity signal consisting of four short blasts. ● ●

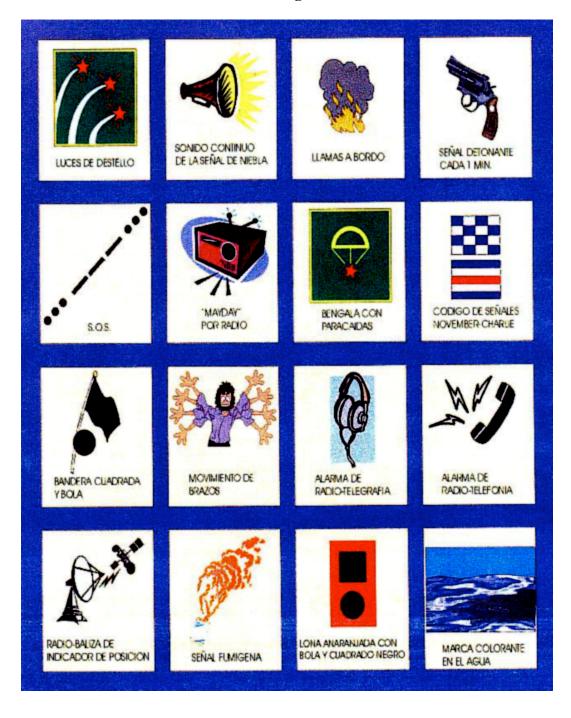
#### D. Siguals to Attract Attention.

- 1. If necessary to attract the attention of another vessel, any vessel may make light or sound signals that cannot be mistaken for any signal authorized elsewhere in any other section, or may direct the beam o her search light in the direction of the danger, in such a way as not to disturb any other vessel. Any light to attract attention of another vessel shall be such that it cannot be mistaken for any aid to navigation. For the purpose of this section, the use of high intensity intermittent or revolving lights, such as strobe lights, shall be avoided.
- 2. Under no circumstances shall the rays of a search light or any other type of blinding light be directed into the pilot house, or in any other manner or direction which would interfere with the navigation of another vessel.

#### E. Distress Signals.

- 1. The following signals used or exhibited indicate distress and need of assistance:
  - a. A gun or other expiosive signal, fired at intervals of about a minute.
  - b. A continuous sounding, with any fog-signaling apparatus.
  - c. Rockets or shells, throwing red stars, fired one at a time, at short intervals.
  - d. A signal made by radiotelegraphy or by any other signaling method,, consisting of the group ••• • (SOS) in the Morse Code.
  - e. A signal sent by radiotelephone, consisting of the spoken word *mayday*.
  - f. The International Code Signal of distress, indicated by "NC."
  - g. A signal consisting of a square flag, having above or below it a ball or
  - h. anything resembling a ball.
  - h. Flames on the vessel (as from a burning tar barrel, oil barrel, etc.).
  - i. A rocket parachute flare or a hand flare showing a red light.
  - i. A smoke signal giving off orange-colored smoke.
  - k. Slowiy and repeatedly raising and lowering arms outstretched to each side.
  - 1. The radiotelegraph alarm signal.
  - m. The radiotelephone alarm signal.
  - n. Signals transmitted by emergency position-indicating radio beacons.
- 2. The use or exhibition of any of the foregoing signals, except for the purpose of indicating distress and need of assistance, and the use of other signals which may be confused with any of the above signals, is prohibited.
- 3. Attention is drawn to the relevant sections of the International Code of Signals, the Merchant Ship Search and Rescue Manual, and the following signals:
  - a. A piece of orange-colored canvas, with either a black square and a circle, or other appropriate symbol (for identification from the air).
  - b. A dye marker.

#### **International Distress Signals - COLREGS/72**



#### **PART V**

#### **MISCELLANEOUS**

#### A. Diving Operations.

- 1. When industrial or commercial diving operations have been coordinated with the Authority, and are being conducted in the Canal, or waters adjacent thereto, a revolving red light shall be displayed in all weather conditions, from sunset to sunrise, from the diving barge or other craft serving the diver. The light shall be so mounted, and of sufficient intensity, as to be yisible for not less than 1 mile. Tite International Code Flag "A", not less than 45 centimeters (18 inches) in height, and of standard proportions, shall be displayed from such craft by day, where it may best be seen. A rigid replica of this fiag may be substituted in lieu thereof.
- 2. Recreational skin diving in waters of the Canal, including Culebra Cut and the channel through Gatun and Mirafiores lakes, and in the waters of all ships' anchorages, is prohibited unless authorized in writing by the Authority. Authorization shall not be given for skin diving at night or at any time, within 450 meters (500 yards) of the Canal axis. When recreational skin diving activities are under way in the Canal, or waters adjacent thereto, a flag of the type described in paragraph 1 of this section shall be displayed from the craft serving the skin diver, in a manner which allows all-round visibility. However, the flag displayed for recreational diving shall not be less than 30 centimeters (12 inches) in height. and shall be of standard proportions.
- 3. Vessels approaching or passing an area where diving activities are under way, shall reduce speed sufficiently to avoid creating a dangerous wash or wake.

#### B. Regulations on Small Crafts Not Transiting the Canal.

1. For the purpose of this section, a small craft is defined as any vessel for recreational purposes up to 20 meters (65 feet) in height, operating in navigable waters of the Canal Operation Compatibility Area. Such craft must be øperated by a person of more than 18 years of age, holding a Small Craft Operator License, issued by the Panama Canal Authority.

#### C. Small Craft Operator License:

Applicants to obtain a Small Craft Operator License must pass a test administered by the Board of Inspectors of the Panama Canal Authority, purchase a copy of the "Panama Canal Waters Technical Operations Manual" at their own expense, and shall keep it on board.

#### D. Prohibitions:

Navigation in Culebra Cut, Miraflores Lake, approaches to the locks, and the Canal channel is prohibited, except when such operation is incidental to movement between points on either side of the navigation channel. The use of water skis, jet skis, windsurfboards,

aquaplanes, or similar equipment, and sports such as swimming and net fishing within the areas described in this paragraph, including the anchorage areas, is also prohibited.

#### **E.** Operator Restrictions:

No vessel shall be operated if her operator:

- a. Is intoxicated or under the influence of any drug, or
- b. Is incapable of safely operating the vessel, because he is under the influence of any drug, wether or not the drug is legal. The fact that one lawfully is or has been using any drug, shall not constitute a defense against a charge of violating this section.

#### F. Safety:

No person shall operate a small craft so close to a transiting or other vessel, so as to hamper the safe operation of either vessel; nor shall any person operate a small craft so as to endanger life or property. A violation of this section is considered a serious offense, and shall result in the cancellation of the offender's operator license.

#### G. Surveilance:

The Authority shall coordinate the surveillance of the Canal Operation Compatibility Area with the respective government authorities, to ensure maximum safety of small crafts, and to prevent unlawful activities or non-compliance with these regulations.

#### F. Penalties:

Violations of any of these sections shall be penalized

#### **SECTION V**

#### OPERATING INSTRUCTIONS FOR SMALL VESSELS AT THE LOCKS

The small vessels, yatchs and others of manual lockage should meet the following requirements:

- A. When they arrive at Balboa or Cristobal:
  - 1. They should call the communication station to receive instructions.
  - 2. They could enter the canal and proceed to the docking areas or achorage flats, only when they receive authorization from the communication station via Channel 12 VHF
    - a. The communication station is responsible to coordinate movements to avoid conflicts with the ships in transit.
    - b. The communication station will notify of these restrictions
  - 3. Vessels that will transit and have made arrangements with agents, would be boarded by the official of inspection upon arrival.
  - 4. Ships without agent, The Captain must call the communication station and make arrangement with the admesurement office to be received authorities. Then they must make arrangement for transit and pay the required toll. Thus the authority should provide the relevant information to the crew and procedures for transit.
- B. Small vessels of manual lockage will not, under any circumstances, pass "el Puente de las Americas" going towards the north, nor the bouys 3 & 6 on the "Bahia de Limon" towards the south, if it does not have a pilot onboard.
- C. If the vessel is operated from an open booth, if the structure allows it, a tent should be installed to protect from sun and rain the pilot and the crew while in transit. The itinerary must be maintained regardless of the weather and sanitary installations would be provided onboard. Failure to comply could delay transit
- D. Small vessel normally transit trough the locks with a large ship and its placement in the chamber is generally as follows:
  - 1. Miraflores locks: north bound, small vessel will enter behind the stern of the larger ship the use the locomotives; south bound, small vessels will enter ahead of the bow of these vessels.
  - 2. Pedro Miguel locks: small vessels will enter either behind the stern or ahead of the bow of the large vessel towed by the locomotive, as indicated by the lock master.

- 3. Gatun locks: north bound small vessels will enter ahead of the bow of the large vessel towed by the locomotive. South bound small vessel will enter the locks behind the stern of these vessels.
- E. Small vessels should keep safe distance from the larger vessels while they are maneuvering trough out the locks. In the event that a small vessel enters the chamber behind the stern of the larger vessel, after receiving instructions from the central wall, they will be tied on the side of the wall to avoid obstructing the larger vessels. As they transit trough the canal, small vessel should travel at the farthest possible right side of the canal or starboard side.
- F. All small vessel of manual lockage must have an anchor. They must have at least four lines of 38.1 meters in length (125 feet) of enough strength to hold the weight of the vessel under tension and four or more suitable fenders to protect the vessel and avoid impact with the walls of the locks.(Old automobile tires are excellent fenders) **Note:** The locks division does not provides lines for small vessels that transit trough the locks.
- G. There must be enough crew members able onboard of the small vessel to loosen or tighten the lines as the water level changes in the chambers and to operate the vessel. **Note:** the locks personnel that works on the walls, have the obligation of only raise the lines and tie them to the wall.
- H. The engines of the small vessels should not be turned off once they are inside the locks chamber; the engines will be available at all times in the event the lines brake or wrongfully handled. Small vessels will move from chamber to chamber by their own propulsion. Before moving the lines from the wall should be released and hoisted onboard and they will be transferred to the wall once again when the vessel reaches the tie up position on the next chamber.
- I. Small vessels operators should be aware that when the locks of the chamber facing the sea or the ones between each chamber open a strong current will be generated towards the sea, therefore vessels should have the appropriate propulsion and enough impulse to maneuver adequately in this current which force varies from one to four knots
- J. When the level in the chamber is high a strong turbulance is produced in the water. The vessel which is tied to the wall throughout this operation should maintain the lines tense and keep the vessel against the wall otherwise it could be dragged by the current and pushed violently against one of the walls and cause damages.
- K. It is prohibited that the crew of the small vessel transiting the locks disembark de vessel while tied to the wall of the locks.
- L. The authority will deny transit to small vessels unable to maintain a speed of five knots. However they can be towed by vessels that are able to maintain said speed or to make arrangements to be towed at their expense by a launch of the ACP.

#### **SECTION VI**

#### GENERAL RULES PERTAINING SMALL VESSELS

The following rules may vary depending on the type of vessel and its activities.

- A. No small vessel may be operated near large vessels in transit. Neither may not navigate to a speed or produce a wake that may endanger the safety of them or other vessel as well as private property or Panama Canal Authority and the life of personnel. Failure to comply with this rule or with any other rule will caused the issued license to be revoke and the appropriate sanctions will applied.
- B. No weapons of any kind should be fired from ships in the Canal waters
- C. No person will be able to board a ship at anchors or in navigation in the Canal Waters, with or without the consent of her captain, except for the Pilots, ships agent, inspection officials during the fulfillment of their functions and persons authorized by the Authority.
- D. No fishing nets will be spread neither other obstructions inside the navigable waters of the Canal. Fishing ships or smaller vessels will not be able anchor to fish neither to drag nets or fishing gear in the anchorage areas or navigable paths. No cables, piping or any type of object should be tend on the path or anchorage, that may obstruct the transit of the vessels, except when it has been authorized.
- E. It is prohibited the navigation on the Culebra Cut, the Lake Miraflores, the vicinity of the locks and the Canal path. However, the path may be crossed when sailed between points located on both sides of it.
- F. No vessel will discharge or will throw in the waters of the Canal, any matter that may contaminate said water. This requirement will not apply to the water of the sanitary services, or to those that are employed to cook or to wash utensils of table. Every vessel, before arrival to the ports of entrance of the Canal, should get rid of waste that is prohibited to be thrown in the canal waters.
- G. When it has been coordinated with the Authority and Diving operations are carried out either commercial or industrial in the Canal or in its adjacent water, a revolving red light, that could be seen in all atmospheric conditions, will be projected from sunset to dawn, from the diving barge, or from the vessel that is providing service to the diver. The light will be mounted and will have an intensity that can be seen at least a mile away. The flag "A", of the International Code, of not less than 45 centimeters (18 inches) of high and of standard proportions, should be hoisted in the vessel during the day, where it can better seen. Instead a stiff replica may be used.
- H. It is prohibited any recreational diving in the Canal waters, including the Culebra Cut, in the stretch between Gatún and Miraflores lakes, in the anchorage areas, unless the Authority authorize it in writing. There will not be nocturnal recreational diving at any time for less than 450 meters (500 yards) of the path of the Canal. When recreational

diving activities are carried out in the Canal or in its adjacent water, a flag as described in the previous paragraph will be hoisted from the vessel that provides the service to the diver, so that it may be visible from any place; however, the flag hoisted flag that indicates recreational diving, will not be less than 30 centimeters (12 inches) of Height and it will follow standard proportions.

- I. The vessels that approach or pass zones where diving is being carried out, should reduce their speed sufficiently, in order to prevent wake.
- J. The following practices are considered unsafe and dangerous:
  - 1. To operate a vessel at a high speed around swimmers and divers.
  - 2. To operate a vessel at high speed near the launching ramps and docking facilities for small crafts so that the wakes may constitute a risk for the people that use these places.
  - 3. Maneuvering close to vessels that are traveling that if engine failure occurs the launch would put in danger the launch or force the vessel to maneuver to avoid collision or to sink the launch.
  - 4. To operate the launch without all the required equipment.
  - 5. To carry passengers in the bow or in another location in which they be exposed of such way that obstruct the visibility of the operator toward the bow or put in danger the passengers.
- K. The practice of water sports is prohibited such as the water ski, jet ski, windsurf, hydroplanes or similar, swimming and fishing with nets in the anchorage areas or ports of the Canal neither in the water of the same path of the Canal from the buoys 1 and 2 in the entrance of the Pacific Ocean sector, to the entrance of the Brakewater of the Atlantic Ocean
- L. When an motorboat or similar equipment, as well as a launch or another vessel is hauling a person on skies, should have the operator and an observer not less than 12 years of age, situated in the launch or vessel in such way that can maintain the operator informed of all the conditions that may be potentially dangerous for the person that is skiing or for any another property or person in the surroundings. The operator will keep all his attention to the operation of the launch or other vessels in safe manner.
- M. It will not be permitted that any person may engage in activities of water ski or jet ski or any other similar activities between sunset and dawn.
- N. No one will be able to operate water skies, jet skies or any other similar equipment in such way that it may put in danger the life, the body, or the property of any person.

- O. No one will be permitted to ski, or to operate a jet ski or any other similar activities from a distance of not less than 30 meters from the shore line at any recreational site for boats.
- P. No one will be permitted the operation of small vessels at a distance of 30 meters from the shore line at any recreational boat site, unless it is necessary this journey to arrive or to return from other recreational areas.
- Q. No small vessel will be operated by someone under the influence of alcohol or any other controlled substance or, if this person was not found in full control of its faculties due to the effects of any drug, even if it was a prescribed drug by a physician. This will not constitute a defense against a charge of infringing the present rule.

#### **SECTION VII**

#### REQUIRED EQUIPMENT FOR VESSELS LESS THAN 20 METERS IN LENGTH

The requirements can vary depending on the type of vessel or the activity it carries out.

- A. The vessels with less than 7 meters in length will carry the following safety equipment:
  - 2 oars or paddles
  - 1 whistle or other sound-producing device, hand-mouth-or power-operated.
  - 1 Bucket, bailer (or electric or manual pump)
  - 20 meters of manila line with a diameter of not less than 15 mm (5/8 inches) or a synthetic line of equivalent strength
  - 2 fire extinguishers of fire approved, whether of 1-1/4 gallon foam, 4-lb. C02 or 2-lb. dry chemical, when the motor is inboard or one fire extinguisher when the motor is an outboard.
  - 1 combination light showing red to port side and green to starboard side or individual red and green sidelights.
  - 1 stern light or all round white light.
  - 1 anchor with 40 meters of suitable cable.
  - 1 red flag
  - 1 flashlight with a red light
  - approved life preserver(USCG Type 1 or Type II), by each person that is onboard in the actual operation. For inspection purposes, it should have same quantity of life vests than the maximum passengers capacity previously established.
  - 1 copy of the Operator's Manual of Launches published by ACP.
- B. The vessels of 7 meters or more, but less than 12 meters in length will carry the following safety equipment:
  - 1 approved life ring not less than 600 mm (24 inches) of exterior diameter, with 20 meters of synthetic rope hitched.
  - 1 whistle, power-operated, audible to a distance of at least a mile.
  - 1 bucket, bailer (or electric or manual pump)
  - 20 meters of manila line with a diameter of not less than 18 mm (3/4 inches) or synthetic line of equivalent strength.
  - 1 boat hook
  - approved fire extinguishers, 2 of which shall be of 2-1/2 gallon foam, 15-lb. C02 or 10-lb.dry chemical, and the third of which shall be 1-1/4 gallon foam, 4-lb.C02 or 2-lb.dry chemical.
  - 1 combination light showing red to port side and green to starboard side, or individual red and green sidelights.
  - 1 stern or all-round white light.
  - 1 anchor with 40 meters of suitable cable.
  - 1 fog bell not less than 200mm (8 inches) outside diameter.
  - 1 red flag

- 1 flashlight with red light
- 1 approved life preserver (USCG Type 1 or Type II), by each person that is onboard in the actual operation. For inspection purposes, it should have same quantity of life vests than the maximum passenger capacity previously established.
- 1 copy of the Operator's Manual of Launches published by ACP.
- C. The vessels of 12 meters or more, but less than 20 meters in length will carry the following safety equipment:
  - approved life rings, not less than 600 mm (24 inches) of exterior diameter, with 20 meters of synthetic rope hitched.
  - 1 mechanical whistle, audible to a distance of at least a mile.
  - 1 bucket (or bilge pump electric or manual)
  - 25 meters of manila line with a diameter of not less than 21 mm or a synthetic line of equivalent strength
  - 4 approved fire extinguishers, 3 of which will be of 2-1/2 gallon foam, 15-lb.CO2 or 10-lb.dry chemical, and the fourth of which shall be 1-1/4 gallon foam, 4-lb.CO2, or 2 -lb.dry chemical.
  - 2 boat hooks.
  - 1 mast headlight, white, 225 degrees fixed to show the light from right ahead to 22.5 degrees abaft the beam on either side.
  - 1 combination light showing red to port side and green to starboard side, or individual red and green sidelights.
  - stern light, white, 135 degrees, placed as nearly practicable at the stern, and so fixed to show the light 67.5 degrees from right aft on each side.
  - 1 anchor with 40 meters of suitable cable.
  - 1 fog bell of not less than 200 mm (8 inches) of outside diameter.
  - 1 red lantern
  - 1 red flag
  - approved life preserver (USCG Type 1 or Type II), by each person that is onboard in the actual operation. For inspection purposes, it should have same quantity of life preservers than the maximum passengers capacity previously established.
  - 1 copy of the Operator's Manual of Launches published by ACP.
- D. Cayucos or piraguas with less than 20 meters in lenght equipped with outboard engines that operate at the Gatún Lake, will carry the following safety equipment:
  - 2 oars or paddles
  - 1 whistle or other sound-producing device, hand mouth or pover operated.
  - 1 bucket, bailer (or electric or manual pump)
  - 20 meters of manila line with a diameter of not less than 21 mm (7/8 inches) or synthetic line of equivalent strength.
  - 1 flashlight
  - 1 approved life preserver for every person onboard.

- E. In almost all cases, the synthetic rope is much stronger than the manila rope, therefore, a synthetic rope should have a smaller diameter than its corresponding and equivalent manila rope. Thus, you should not provide a synthetic rope with the same diameter of the especified manila rope.
- F. The dimensions and sizes indicated are of international standards.
- G. The life vests, life rings and the fire extinguishers required in this annex are from the type approved by an international statutory agency, or its equivalent, and it will be subject of approval by the Floating Equipment Inspector.
- H. The life vests, life rings and fire extinguishers that are required in this annex will be marked in a permanent way with the name of the vessel in which they are carried.
- I. The red flag and red flashlight are for emergency use to indicate that the vessel cannot sail or has another problem and needs help. These signals will be used instead of pyrotechnics.

#### **SECTION VIII**

# MOTORBOAT OPERATORS LICENCE, INSPECTIONS AND CERTIFICATION.

- A. The Board of Local Inspectors shall examine and issue the license for small crafts operators to the qualified applicants. These licenses will be issued subject to these conditions and limitations, as will make their issuance not conflict with or hamper the normal operation, maintenance, sanitation or protection of the Canal area.
- B. All applicants for small crafts operators license should be 18 years old of age or more and not to have physical impairment neither any disability that may cause him harm or others while operating a launch.
- C. The applications for a motorboat operators licenses may be obtained at the offices of the Board of Local Inspectors. Upon applicant's request, he/she is required to take an exam to determine the sharpness of its visual perception, or if he/she suffers from color blindness.
- D. Every applicant for motorboat operators license should comply with certain requirements that vary according to the type of vessel that the applicant would be operating (ACP vessel, commercial or non-commercial). These requirements can be revised by the Board of Local Inspectors. Among them:
  - 1. To attend a class of Prevention of collisions Canal waters offered by an instructor of the Section of Training and Maritime Development.
  - 2. To present a practical demonstration of its handling to operate a launch in an adequate and safe way in the presence of an inspector, or to present satisfactory proof of such ability.
  - 3. To pass an exam regarding the following subjects:
    - a) Regulations for the Prevention of Collisions in the Canal waters
    - b) Safety Equipment
    - c) The adequate method of operating and to sail small crafts that carry passengers.
- E. The vessels of less than 20 meters (65 feet) in length should be certified or inspected annually by the Authority of the Canal of Panama. The certificate should specify the quantity of passengers that said vessel will be able to carry and the quantity of life vests, fire extinguishers and other equipment that it should carry.
- F. Any small craft that operates in Canal waters should be operated only by licensed operators of vessels of less than 20 meters (65 feet) with valid provided by the Board of Local Inspectors of ACP.
- G. The Administrator of the ACP or the person to whom he/she delegates explicitly this faculty, will apply the corresponding sanctions for the violations of these regulations, as established on Chapter X of the Maritime Regulations for the Operation of the Canal.

# WHISTLE SIGNALS

MANEUVERING & WARNING SIGNALS	INTERNATIONAL	P.C.C.
I am altering my course to starboard		None
I am altering my course to port	• •	None
I intend to leave you on my port hand side	None	
I intend to leave you on my starboard hand side	None	••
I intend to overtake you on your port side	None	••
I intend to overtake you on your starboard side	None	
I am operating stern propulsion	•••	•••
Danger signal	••••	••••
RESTRICTED VISIBILITY SIGNALS	INTERNATIONAL	P.C.C.
Power driven vessel making way	— (int. ≤ 2 min.)	— (int. ≤ 2 min.)
Power driven vessel underway but stopped and making no way	— — (int. ≤2 min.)	— — (int. ≤ 2 min.)
Vessel not under command; Vessel restricted in her ability to maneuver; Sailing vessel; Vessel engage in towing or pushing	— ••(int. ≤ 2 min.)	— • •(int. ≤ 2 min.)
Last vessel towed if manned	— •••(int. ≤ 2 min.)	—•••(int. ≤ 2 min.)
Vessel of less than 100 meters in length at anchor	$\Lambda$ (int. $\leq 1$ min.)	$\triangle$ (int. $\leq 1$ min.)
Vessel of 100 meters or more in length at anchor	$\Delta + \delta^*$ (int. $\leq 1$ min.)	$\Delta + \delta^{*}$ (int. $\leq 1$ min.)
Every vessel at anchor in restricted visibility, may sound to warn approaching vessels		
Vessel aground less than 100 meters in length	<b>②</b> △ <b>②</b> (int. ≤ 1 min.)	<b>②</b> △ <b>②</b> (int. ≤ 1 min.)
Vessel aground of 100 meters or more in length	<b>②</b> Δ <b>②</b> + <b>⑤</b> * (int. ≤ 1 min.)	<b>3 ∆ 3</b> + <b>6</b> <sup>*</sup> (int. ≤ 1 min.)
CALLING OR REQUESTING SIGNALS	INTERNATIONAL	P. C. C.
Open pipeline / pipeline is open	None	
One tug	None	
Two tugs	None	
A launch	None	

A Rapid ringing of the bell for 5 seconds

● Sound of a ship's gong for 5 second

- Prolonged blast (4-6 sec.)

<sup>•</sup> Three strokes on ship's bell • Short blast (1 sec.)