

PACIFIC PILOTAGE AUTHORITY

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NOTICE TO INDUSTRY

Date Issued: 29 June 2020 **(revised 13 April 2022)** **Notice Number:** 08/2020

Subject: Interim Guidelines for Seymour Narrows and Johnstone Strait

Geographic Area: Inside Passage from Cape Mudge to Pine Island

Details: The attached document is an interim update of the 2004 Guidelines for the Inside Passage from Cape Mudge to Pine Island

Guideline:

- The full interim guidelines are attached for reference.
- The interim guidelines apply to all vessels under the conduct of a licensed pilot or pilotage certificate holder, and all waived vessels under Section 10 of the *Pacific Pilotage Regulations*.
- Once the Traffic Separation Scheme has been promulgated, a revised document will be presented to all users for discussion and comment before finalizing as the new Guidelines for the area.

If there are any queries, concerns or a wish to further discuss these issues please feel free to contact me at oberkev@ppa.gc.ca or by telephone at 604-666-6771.

Kevin Obermeyer
Chief Executive Officer

Final interim version of the Seymour Narrows Guidelines

April 2022

Section 1. Fishing vessel recommendations

- 1) The 2003 Advisory from Canadian Coast Guard should be adopted as a solution with the following suggested additions:
 - a. All vessels over 24m in length should participate in the Vessel Traffic System.
 - b. Concentrations of cruise ships can be expected from April to October in the Seymour Narrows area during slack water periods.
 - c. At times north bound commercial traffic will use Race Passage.
- 2) All vessels should monitor the VTS operating channel for the area.

Note: A copy of the Amended 2003 Advisory is attached as Appendix 1.

Section 2. Tugs and tow recommendations

- 1) The 2003 Advisory from Canadian Coast Guard should be adopted as a solution.
- 2) All vessels should monitor the operational VTS channel for the area.
- 3) All tugs should provide MCTS with an ETA for Maude Island.
- 4) The Pacific Pilotage Authority will provide both US and Canadian tug operators with a detailed schedule of cruise vessel passages planned for Seymour Narrows, prior to the beginning of each cruise season and posted on the Pilotage Authority website. The schedule will be kept up to date as required.
- 5) Tugs should take note of the order of passage arranged by the pilots of the cruise ship.
- 6) Tug operators should fully consider the rules of the road as well as the intentions of the cruise vessels and then broadcast intentions for their passage on the VTS channel.

Section 3. Passenger ship recommendations

a. Guidelines for first time arrivals

All vessels over 295m LOA arriving on the BC coast for the first time shall:

- a. Be evaluated on a case by case basis by the Pacific Pilotage Authority (PPA) with the technical expertise of the British Columbia Coast Pilots (BCCP) and be required to notify the PPA with as much lead time as possible but not less than 9 months in advance.
- b. Provide as much information on the vessel's particulars and maneuvering characteristics including details of the bridge layout as is available.
- c. Subject to the information provided the proponent may be required to produce a model of the vessel compatible with the PPA/BCCP PSTAR simulator in order to run initial simulations through the area of passage prior to the new vessel's arrival on the coast. If simulation is required, there must be an opportunity to confirm ship handling characteristics on the vessel prior to permitting night-time transits of Seymour Narrows.
- d. All feasibility simulations will require 3-D current modeling (unless already available in PSTAR) and will be to the cost of the proponent.
- e. All feasibility simulations will utilize the services of an independent third party facilitator under the guidance of the PSTAR Committee and will be to the cost of the proponent.
- f. If required, the PPA will facilitate a ship visit by a BC Coast Pilot on the proposed vessel prior to arrival in order to observe the vessel when maneuvering.
- g. Confine transits to daylight for Seymour Narrows until the PPA, BCCP and master are satisfied that the vessel can safely make the transit in darkness.
- h. Confine transits to daylight only if the simulations or initial daylight transits indicate an unacceptable risk for night-time operation.
- i. If the initial assessment information of sister ships of vessels previously assessed confirms similar handling characteristics then they will not require simulations.

Note: vessels under the LOA limitations above may require simulations, if information provided suggests unusual handling characteristics.

b. Guidelines for Cautionary Areas (passenger ships)

- 1)(a) When transiting Seymour Narrows cautionary area (CA), vessels under 295m should plan for slack water. Under normal conditions, the maximum current strength for any transit through a CA is not more than 5 knots. Vessels over 295m will have the maximum current established through a navigational risk assessment.
- (b) Pilots should endeavour to line up the vessels that they are on to best advantage by:
 - a. Ensuring the least maneuverable slowest piloted vessels go through the Seymour Narrows CA at the slackest water.

- b. The more maneuverable faster piloted vessels will transit prior to slack water or on the tail end.
- c. Making use of Rule 9, Canadian modification, which gives the vessel transiting with the current the right of way and the ability to decide where and when oncoming traffic can pass it.

c. Speed reduction guidelines (passenger ships)

- 1) When southbound, vessels will schedule their arrival time at Pine Island in order to reach Seymour Narrows slack water in 7.5 hours
- 2) When northbound, vessels clearing Seymour Narrows will schedule their arrival time at Pine Island pilot station in 7.5 hours
- 3) Due to local conditions, the three following CAs require a higher level of care and reduced speed to ensure safe transits:
 - a. Scarlet Point to Doyle Island
 - b. Bold Head to Sophia Islands
 - c. Fanny Island to Cape Mudge
- 4) Particular care regarding wash and wake must be taken in the following areas:
 - a. Discovery Passage (Quathiaski Cove)
 - b. Seymour Narrows
 - c. Chatham Point (Half-Moon Bay and Rock Point)
 - d. Current and Race Passage
 - e. Blackney Pass
 - f. Weynton Passage
 - g. Alert Bay
- 5) Notwithstanding the above it is understood that the Collision Regulations including the Canadian modifications will prevail, with particular attention to Rule 6 (Safe Speed), Rule 9 (Narrow Channels and Canadian Mod) and Rule 19 (Restricted Visibility Rule).

Section 4. Recommendations for freighters

- 1) The maximum sized freighter for unrestricted operation is 225m LOA x 33m beam x 12.0m draft.
 - A freighter over 225m be evaluated on a case by case basis by the Pacific Pilotage Authority (PPA) and the BC Coast Pilots (BCCP) and be required to notify them at least 9 months in advance.
 - Provide as much information on the vessel's particulars and maneuvering characteristics as is available.
 - Likely be required to produce a model of the vessel compatible with the PPA/BCCP PSTAR Kongsberg simulator in order to run initial simulations through the area of passage prior to the new vessel's arrival on the coast.
 - Require 3-D current modeling (unless already available in the PPA/BCCP PSTAR) and will be to the cost of the proponent.
 - Require the simulations to be conducted and facilitated by the PSTAR Committee and will be to the cost of the proponent.
- 2) The maximum recommended tanker size for transit of Seymour Narrows – Johnstone Strait is 180m LOA x 33m beam x 11.0m draft.
- 3) Freighters should make use of slackest water possible and follow the pilot's requirements for line up.

Note: the PSTAR Committee will be conducting simulations on the 225m and above freighters in 2020 using the 3-D current and tidal data.

Section 5. Recommendations for all vessels

a. Communication guidelines

- 1) English is the recommended language for all vessels. The marine industry should be encouraged to enforce an English only policy on the bridge of vessels under pilotage for all navigational directions.
- 2) Safety corridors will be established as per the attached charts (Appendix 2), identifying the preferred deep-sea vessel corridor, the domestic traffic corridor and the safety margin from the grounding line.
 - There must be frequent position fixing by the bridge team and any concerns immediately brought to the attention of the pilot.
 - Voyage plans must factor in metrological conditions, particularly wind, current, and visibility.

- The Master-Pilot Exchange (MPX) process must include a discussion on the availability of the engines. Under the Pilotage Act the pilot has the conduct of the vessel and thus has full control over engine orders for immediate use. The pilot and the bridge team must discuss how each vessel would prefer to receive these orders for a quick increase in speed to address a developing situation or if required, a crash stop.
- 3) All agreements on passing or overtaking arrangements should be made on the designated VTS channel and cell phones are not to be utilized on the bridge unless prior agreement is made with the bridge team, as pilots speaking to each other on cell phones instead of VHF reduces the ability to have a shared mental picture of the situation. If cell phones are utilized VTS is to be informed of the arrangements made in this manner.
 - 4) Regulatory reporting requirements should be followed for all near miss/close quarters, so that accurate record keeping for risk assessment purposes is maintained.
 - 5) Ship to ship communications: All communications from other ships are to be answered in as short a time span as possible. If a pilot does not receive an answer from the other ship in a timely manner, they should call VTS and request that they call the ship that is not responding.

b. Guidelines in the event of mechanical and electrical failures

- 1) All equipment failures that affect the safe navigation of the vessel should initially be reported to VTS in accordance with regulatory reporting requirements, so that accurate records can be kept.
- 2) Vessel size and handling characteristics should be taken into account in order to minimize the impact of an equipment failure. In addition, where possible, simulation should be utilized to assess the impact of handling characteristics and equipment failure in the narrow confines of Seymour Narrows – Johnstone Strait.
- 3) Vessels with a history of critical breakdowns may be refused access through Seymour Narrows.
- 4) Emergency anchorages in the area have been identified by the BC Coast Pilots in consultation with First Nations:
 - a. Deep Water Bay (50° 11' 12" N – 125° 20' 41" W)
Depth 20 meters, Swing 575 meters
 - b. Duncan Bay (50° 04' 57" N – 125° 17' 25" W)
Depth 12.8 meters, Swing 625 meters
 - c. Elk Bay (50° 16' 55" N – 125° 55' 33" W)
Depth 25 meters, Swing 550 meters
 - d. Menzies Bay (50° 07' 19" N – 125° 22' 06" W)
Depth 10 meters, Swing 500 meters
 - e. Sunderland Channel (50° 27' 27" N – 125° 56' 41" W)
Depth 53 meters, Swing 980 meters

Section 6. General recommendations

a. Guidelines for passing, meeting and routing

- 1) It is recommended that for Seymour Narrows pilots should line up vessels that they are on to best advantage by:
 - a. Ensuring the least maneuverable slowest vessels go through at the slackest water.
 - b. The more maneuverable faster vessels will transit prior to slack water or on the tail end.
 - c. Making use of Rule 9, Canadian modification, which gives the vessel transiting with the current the right of way and the ability to propose where and when oncoming traffic can pass it.
 - d. Ensuring that all tugs with tows transiting on the same slack tide are taken into consideration when establishing the vessel line up.
- 2) Due to narrow channels and local currents, there are several locations within the SN/JS corridor that require Single Lane Alternating Traffic in order to ensure safe transits of larger vessels. Deep sea vessels (cruise ships, freighters, etc.) shall not meet, and all vessels over 20m in length should avoid meeting, in the following locations:
 - a. Race Point to Separation Head
 - b. Chatham Point
 - c. Current and Race Passage
 - d. Blackney Passage
 - e. Weynton Passage
 - f. North of Haddington Island
- 3) All vessels must clearly indicate to VTS when going against the general flow of the recommended traffic separation scheme at Race Passage and Haddington Island.
- 4) All vessels must pay attention to the Canadian Modifications to the Collision Regulations that apply in these waters. Excerpts from the regulations are included in Appendix 3.

b. Mitigation measures

- 1) In many instances the vessel can technically fit in the restricted waters under ideal conditions but would likely require mitigation measures since conditions are not often ideal.
- 2) Mitigation measures that shall be considered among others are:
 - a. Current or wind restrictions
 - b. Speed restrictions
 - c. Single lane alternating traffic

- d. The addition of radar in the area (ex. Camp Point, Chatham Point, Blackney Pass)
- e. MCTS active vessel oversight
- f. Daylight only transits
- g. Go/no go zones (ex. Vansitart)
- h. Coordinated transits (companion transits)
- i. AIS required for vessels under 20m vessels working within a Safety Area (SA)

Section 7. Indigenous areas of concern

All First Nations concerns regarding wash and wake have been addressed in section 3 (c).

Appendix 1

ADVISORY NOTICE

Seymour Narrows and the confined waters of the Inside Passage

In accordance with the VTS Zones Regulations, every ship 20 metres or more in length, every ship engaged in towing or pushing any vessel or object, other than fishing gear, where

- (i) the combined length of the ship and any vessel or object towed or pushed by the ship is 45 metres or more in length, or
- (ii) the length of the vessel or object being towed or pushed by the ship is 20 metres or more in length

is required to participate with Vessel Traffic Services (VTS) when within a Canadian VTS Zone.

The VTS Zones Regulations do not apply to pleasure yachts or recreational craft that are less than 30 metres (98.4 feet) in length, or to Fishing vessels that are less than 24 metres (78.7 feet) in length and not more than 150 gross tonnes.

VTS Sector Frequencies:

North of Merry/Ballenas Island Victoria Traffic VHF Channel 71

Hecate Strait/Inside Passage Prince Rupert Traffic VHF Channel 11

Dixon Entrance/Chatham Sound Prince Rupert Traffic VHF Channel 71

Small Craft Operators:

In the general interest of safety, and with due regard to prudent seamanship, **all operators of small craft not participating with VTS** are reminded that large vessels are severely restricted in their ability to manoeuvre in confined waters and that consideration must be given to their safe and unimpeded transit. You should also:

- Listen (as passive participants) to VTS communications to obtain information on the positions and movements of larger participating marine traffic in the area. Victoria Traffic, VHF Channel 71 (156.575 MHz).
- Observe at all times the International Regulations for the Prevention of Collisions at Sea, 1972 with Canadian Modifications (Collision Regulations) with particular regard to Rule 6 - Safe Speed, and Rules 9(b) and 9(c) - Narrow Channels.

Fishing Vessels:

Fishing Vessels (24 metres in length or greater) engaged in fishing or while in transit are required to participate with Vessel Traffic Services (VTS) and monitor the designated frequencies for the VTS Sector they are currently in. Fishing Vessels (less than 24 metres) although not required to participate should also monitor the VTS sector frequencies.

When circumstances allow and taking into consideration regulatory requirements, fishing vessels engaged in a fishery are advised to leave the center of any channel clear for the unobstructed passage of other vessels. All vessels including vessels engaged in a commercial fishery are advised that it is imperative that correct lights and shapes are exhibited in accordance with the

International Regulations for Preventing Collisions at Sea, 1972 with Canadian Modifications as amended. Fishing Vessels and other vessels when underway are required by regulation to travel with high intensity deck lights extinguished. Vessels in contravention will be subject to severe penalties.

Gill Net Fishing Vessels should remain on the end of their net to enable transiting vessels, when known to be in transit in an active fisheries area, to identify where the fishing vessel is in relation to her net. In addition, at night, it is recommended that the Gill Net Fishing Vessel indicate the lie of their net to transiting vessels by directing the beam of her searchlight in the direction of the danger.

Commercial Vessels:

All commercial vessels transiting an open fishing ground are advised to monitor VHF Channel 78A (156.925 MHz) in addition to the VTS Channel for the VTS Sector they are in. Vessels while in transit through the grounds should broadcast their intended track at frequent intervals (every 1/2 hour) on VHF Channel 78A, and more frequently under reduced visibility conditions. Where possible and taking into consideration regulatory requirements, Commercial Vessels in transit through a fishing ground are advised to set a course through the center of the navigable channel.

All Vessels:

Subject to tide and current conditions all vessels are advised that they may encounter northbound vessels in Race Passage. Vessels are advised to maintain a good lookout and contact Victoria Traffic for participating traffic in the area.

For Additional Information:

Refer to Part 3 of the Pacific and Western Arctic edition of Radio Aids to Marine Navigation (RAMN) : <https://www.ccg-gcc.gc.ca/publications/mcts-sctm/ramn-arnm/part1-eng.html>

Contact Victoria MCTS at (250) 363-6333

Contact Prince Rupert MCTS at (250) 627-3070

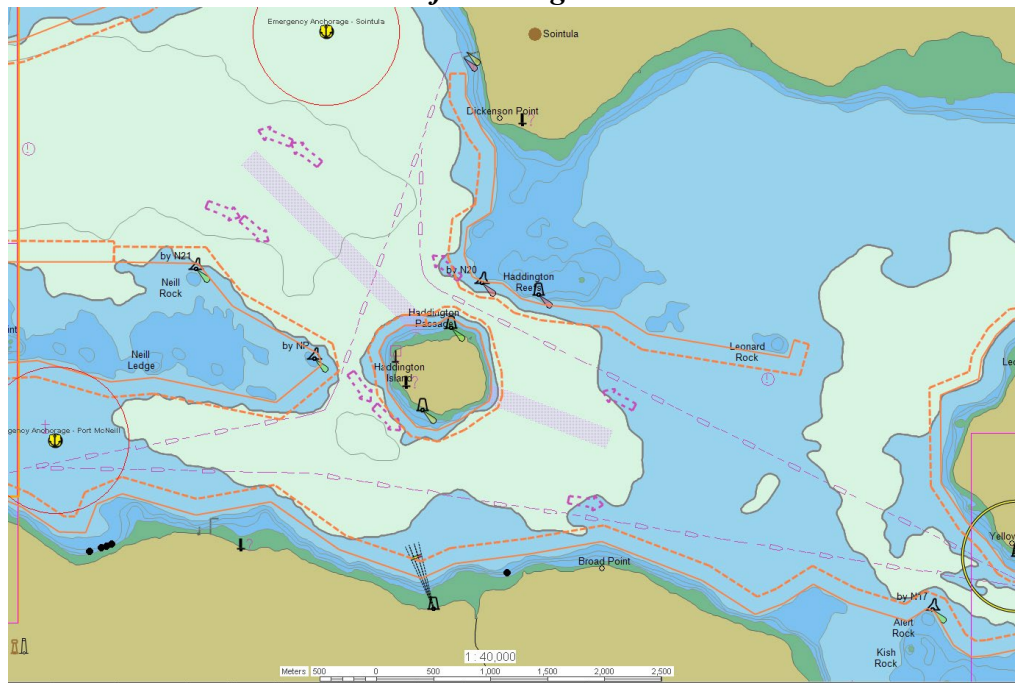
Or visit the MCTS website @ <https://www.ccg-gcc.gc.ca/mcts-sctm/index-eng.html>

Appendix 2

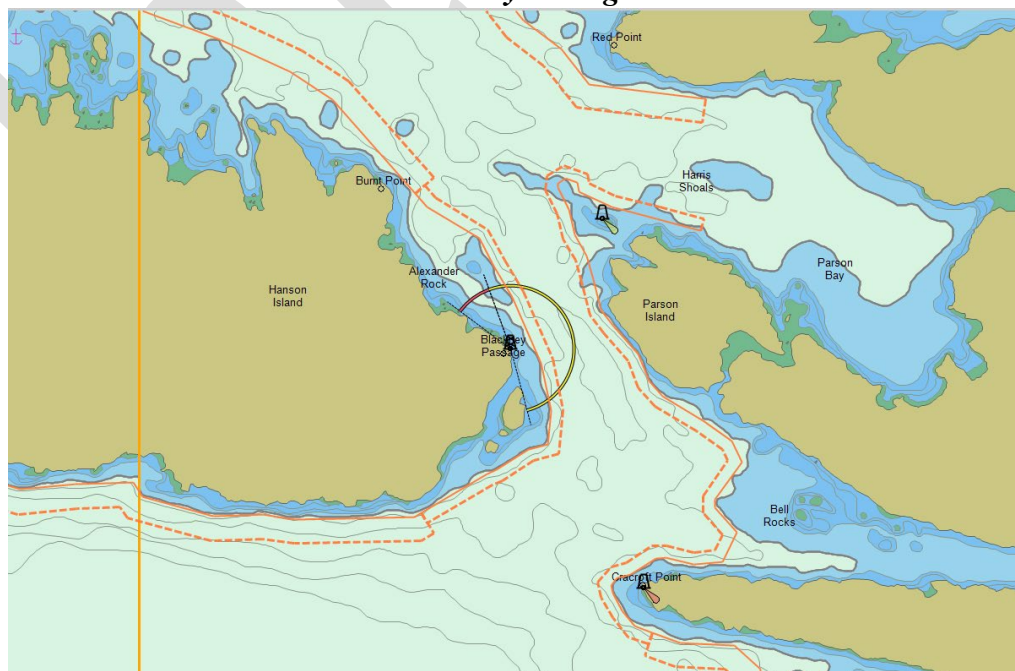
Safety corridors

The orange lines in the pictures below indicate the extremities of the safety corridors in key choke points of the Inside Passage. Co-ordinates for safety corridors, for the entire BC coast, are available upon request.

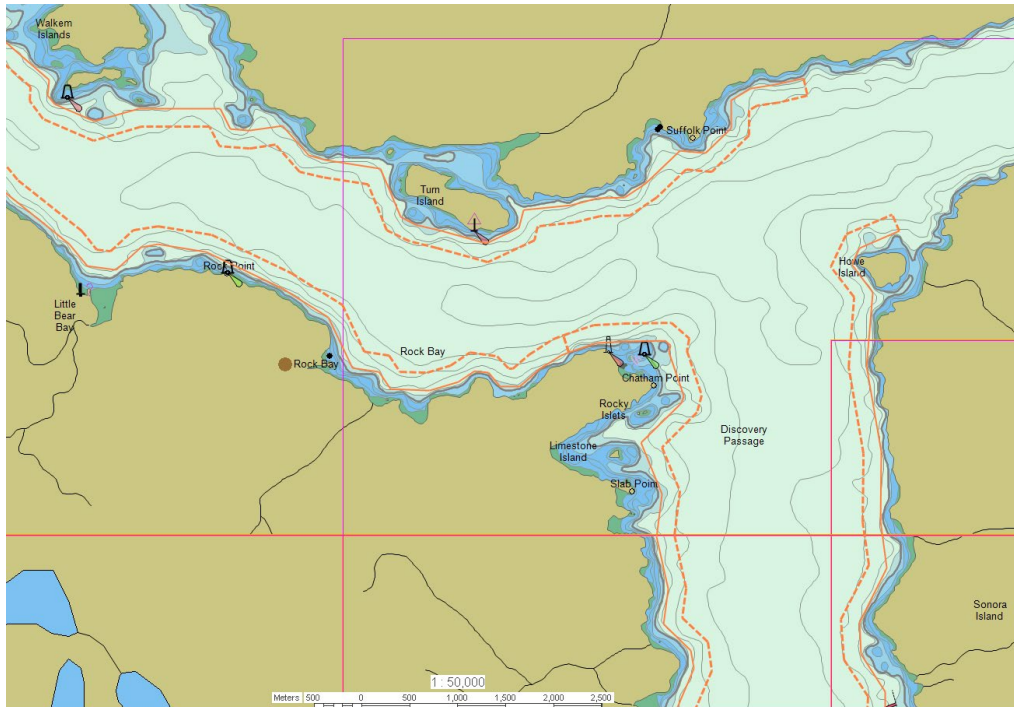
North of Haddington Island



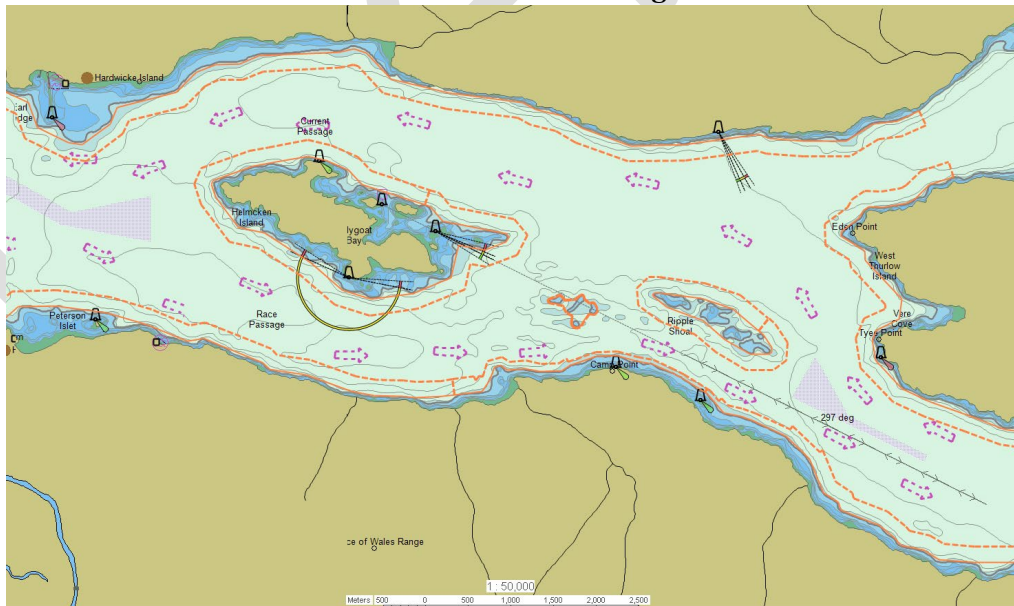
Blackney Passage



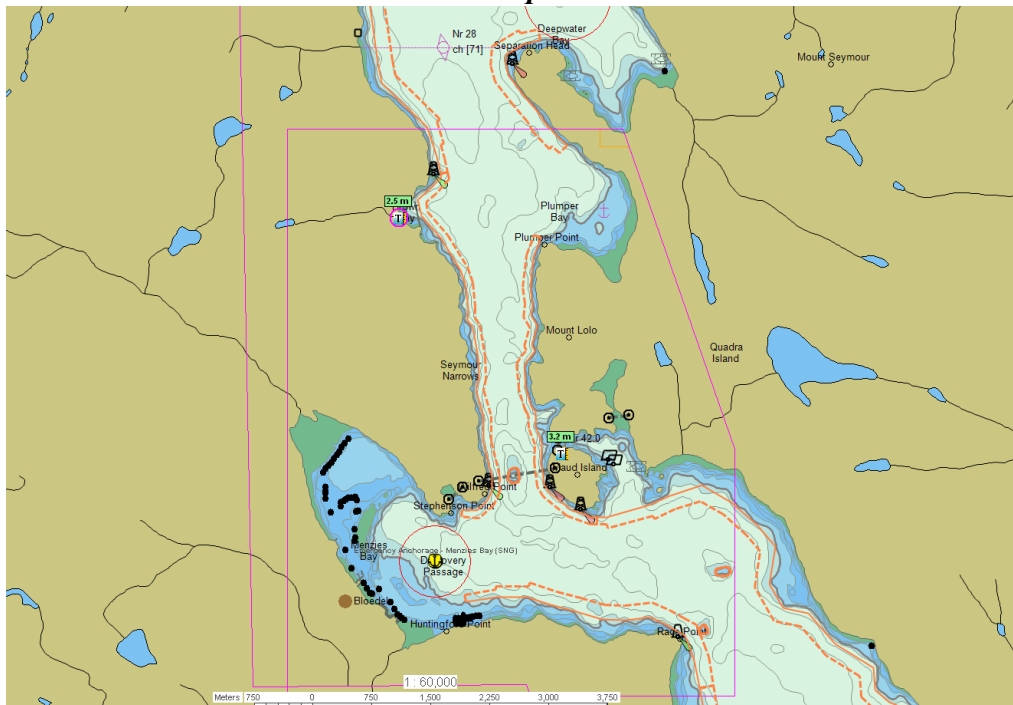
Chatham Point



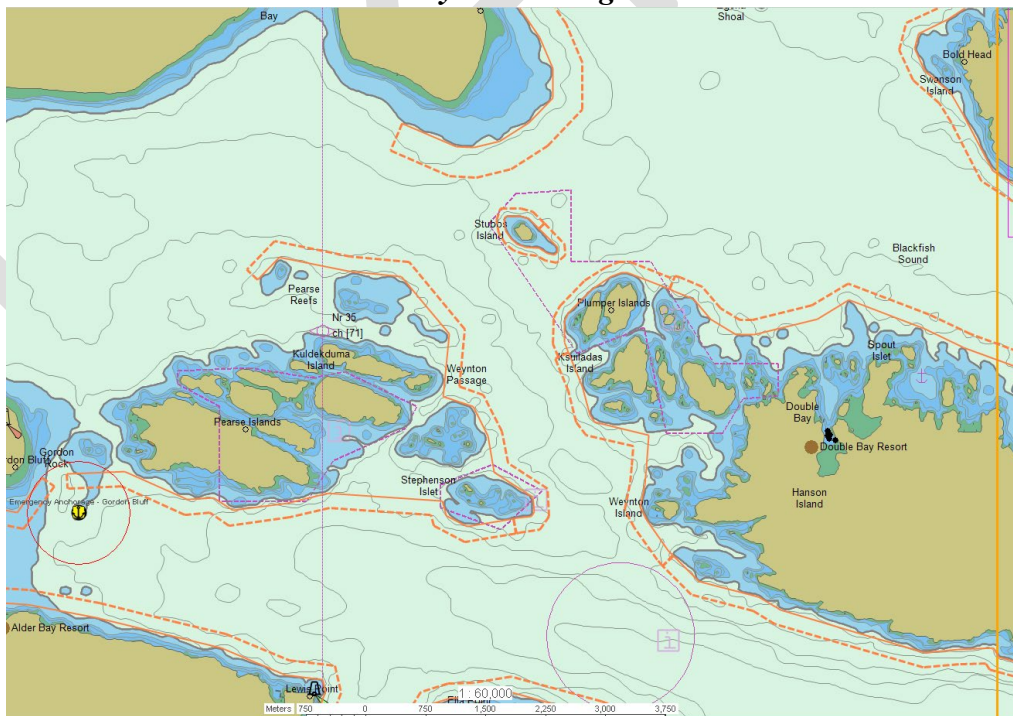
Current and Race Passages



Race Point to Separation Head



Weynton Passage



Appendix 3

Excerpts from Collision Regulations with Canadian Modifications

(last amended on 2014-01-29)

Rule 6 - Safe Speed — International

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.

In determining a safe speed the following factors shall be among those taken into account:

(a) By all vessels:

- (i) the state of visibility,
- (ii) the traffic density including concentrations of fishing vessels or any other vessels,
- (iii) the manoeuvrability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions,
- (iv) at night the presence of background light such as from shore lights or from back scatter of her own lights,
- (v) the state of wind, sea and current, and the proximity of navigational hazards,
- (vi) the draught in relation to the available depth of water.

(b) Additionally, by vessels with operational radar:

- (i) the characteristics, efficiency and limitations of the radar equipment,
- (ii) any constraints imposed by the radar range scale in use,
- (iii) the effect on radar detection of the sea state, weather and other sources of interference,
- (iv) the possibility that small vessels, ice and other floating objects may not be detected by radar at an adequate range,
- (v) the number, location and movement of vessels detected by radar,
- (vi) the more exact assessment of the visibility that may be possible when radar is used to determine the range of vessels or other objects in the vicinity.

Safe Speed — Canadian Modifications

(c) In the Canadian waters of a roadstead, harbour, river, lake or inland waterway, every vessel passing another vessel or work that includes a dredge, tow, grounded vessel or wreck shall proceed with caution at a speed that will not adversely affect the vessel or work being passed, and shall comply with any relevant instruction or direction contained in any Notice to Mariners or Notice to Shipping.

(d) For the purpose of paragraph (c), where it cannot be determined with certainty that a passing vessel will not adversely affect another vessel or work described in that paragraph, the passing vessel shall proceed with caution at the minimum speed at which she can be kept on her course.

Rule 9 - Narrow Channels — International

- (a) 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 as is safe and practicable.
- (b) A vessel of less than 20 metres 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.
- (c) A vessel engaged in fishing shall not impede the passage of any other vessel navigating within a narrow channel or fairway.
- (d) A vessel shall not cross a narrow channel or fairway if such crossing impedes the passage of a vessel which can safely navigate only within such channel or fairway. The latter vessel may use the sound signal prescribed in Rule 34(d) if in doubt as to the intention of the crossing vessel.
- (e) (i) In a narrow channel or fairway when overtaking can take place only if the vessel to be overtaken has to take action to permit safe passing, the vessel intending to overtake shall indicate her intention by sounding the appropriate signal prescribed in Rule 34(c)(i). The vessel to be overtaken shall, if in agreement, sound the appropriate signal prescribed in Rule 34(c)(ii) and take steps to permit safe passing. If in doubt she may sound the signals prescribed in Rule 34(d).
- (ii) This Rule does not relieve the overtaking vessel of her obligation under Rule 13.
- (f) A vessel nearing a bend or an area of a narrow channel or fairway where other vessels may be obscured by an intervening obstruction shall navigate with particular alertness and caution and shall sound the appropriate signal prescribed in Rule 34(e).
- (g) Any vessel shall, if the circumstances of the case admit, avoid anchoring in a narrow channel.

Narrow Channels — Canadian Modifications

- (h) Notwithstanding paragraph (d), in the waters of the Great Lakes Basin, a vessel that can safely navigate only within a narrow channel or fairway shall, if a crossing vessel impedes her passage, use the sound signal prescribed in Rule 34(d) if in doubt as to the intention of the crossing vessel.
- (i) Notwithstanding paragraph (e), in a narrow channel or fairway in the waters of the Great Lakes Basin, a vessel shall indicate its intention to overtake, or its agreement to being overtaken, as the case may be, by sounding the whistle signals prescribed in Rule 34(j).
- (j) In the Canadian waters of a narrow channel or fairway a barge or an inconspicuous, partly submerged vessel or object shall not be navigated, moored or anchored so as to impede the safe passage of any other vessel or object using those waters.
- (k) Notwithstanding paragraph (a) and Rule 14(a), in the Canadian waters of a narrow channel or fairway where there is a current or tidal stream and two power-driven vessels are meeting each other from opposite directions so as to involve risk of collision,
 - (i) the vessel proceeding with the current or tidal stream shall be the stand-on vessel and shall propose the place of passage and shall indicate the side on which she intends to pass by sounding the appropriate signal prescribed in Rule 34(a) or (g),

- (ii) the vessel proceeding against the current or tidal stream shall keep out of the way of the vessel proceeding with the current or tidal stream and shall hold as necessary to permit safe passing,
- (iii) the vessel proceeding against the current or tidal stream shall promptly reply to the signal referred to in subparagraph (i) with the same signal, if she is in agreement, and with the sound signal prescribed in Rule 34(d), if she is in doubt.

Rule 13 - Overtaking — International

- (a) Notwithstanding anything contained in the Rules of Part B, Sections I and II, any vessel overtaking any other vessel shall keep out of the way of the vessel being overtaken.
- (b) 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 sternlight of that vessel but neither of her sidelights.
- (c) When a vessel is in any doubt as to whether she is overtaking another, she shall assume that this is the case and act accordingly.
- (d) Any subsequent alteration of the bearing between the two vessels shall not make the overtaking vessel a crossing vessel within the meaning of these Rules or relieve her of the duty of keeping clear of the overtaken vessel until she is finally past and clear.

Overtaking — Canadian Modification

- (e) Notwithstanding paragraph (b), in the waters of the Great Lakes Basin, a vessel shall be deemed to be overtaking if approaching another vessel from a direction more than 22.5° abaft her beam, that is, in such a position with reference to the vessel she is overtaking that at night she would not be able to see either of the sidelights of the other vessel but would be able to see
 - (i) the sternlight of the other vessel, or
 - (ii) in the case of a power-driven vessel lighted in accordance with Rule 23(d) or (f), the all-round white light or lights of the other vessel.

Rule 24 - Towing and Pushing — International

- (a) A power-driven vessel when towing shall exhibit:
 - (i) instead of the light prescribed in Rule 23(a)(i) or (a)(ii), 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 tow exceeds 200 metres, three such lights in a vertical line,
 - (ii) sidelights,
 - (iii) a sternlight,
 - (iv) a towing light in a vertical line above the sternlight,
 - (v) when the length of the tow exceeds 200 metres, a diamond shape where it can best be seen.
- (b) 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 exhibit the lights prescribed in Rule 23.

(c) A power-driven vessel when pushing ahead or towing alongside, except in the case of a composite unit, shall exhibit:

- (i) instead of the light prescribed in Rule 23(a)(i) or (a)(ii), two masthead lights in a vertical line,
- (ii) sidelights,
- (iii) a sternlight.

(d) A power-driven vessel to which paragraph (a) or (c) of this Rule applies shall also comply with Rule 23(a)(ii).

(e) A vessel or object being towed, other than those mentioned in paragraph (g) of this Rule, shall exhibit:

- (i) sidelights,
- (ii) a sternlight,
- (iii) when the length of the tow exceeds 200 metres, a diamond shape where it can best be seen.

(f) Provided that any number of vessels being towed alongside or pushed in a group shall be lighted as one vessel,

- (i) a vessel being pushed ahead, not being part of a composite unit, shall exhibit at the forward end, sidelights,
- (ii) a vessel being towed alongside shall exhibit a sternlight and at the forward end, sidelights.

(g) An inconspicuous, partly submerged vessel or object, or combination of such vessels or objects being towed, shall exhibit:

- (i) if it is less than 25 metres 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 at or near the forward end,
- (ii) if it is 25 metres or more in breadth, two additional all-round white lights at or near the extremities of its breadth,
- (iii) if it exceeds 100 metres in length, additional all-round white lights between the lights prescribed in subparagraphs (i) and (ii) so that the distance between the lights shall not exceed 100 metres,
- (iv) a diamond shape at or near the aftermost extremity of the last vessel or object being towed and if the length of the tow exceeds 200 metres an additional diamond shape where it can best be seen and located as far forward as is practicable.

(h) Where from any sufficient cause it is impracticable for a vessel or object being towed to exhibit the lights or shapes prescribed in paragraph (e) or (g) of this Rule, all possible measures shall be taken to light the vessel or object towed or at least to indicate the presence of such vessel or object.

(i) Where from any sufficient cause it is impracticable for a vessel not normally engaged in towing operations to display the lights prescribed in paragraph (a) or (c) of this Rule, such vessel shall not be required to exhibit those lights when engaged in towing another vessel in distress or otherwise in need of assistance. All possible measures shall be taken to indicate the nature of the relationship between the towing vessel and the vessel being towed as authorized by Rule 36, in particular by illuminating the towline.

Towing and Pushing — Canadian Modifications

(j) For the purpose of paragraph (h), if it is impracticable for a barge being towed to comply with paragraph (e) within the Canadian waters of a roadstead, harbour, river, lake or inland waterway, it shall carry one all-round white light at each end; however, in a case where two or more barges are grouped together, the barges

- (i) may instead carry one all-round white light at each end of the group, and
- (ii) if the total length of the group exceeds 100 metres and the group is lighted in accordance with subparagraph (i), shall carry an additional all-round white light located as close as practicable to the mid-point of the group.

(k) Notwithstanding paragraph (c), in the waters of the Great Lakes Basin, a power-driven vessel, when pushing ahead or towing alongside, shall exhibit two towing lights in a vertical line instead of the sternlight prescribed in paragraph (c).

(l) In the waters of the Great Lakes Basin, a special flashing light shall be exhibited at the forward end of a vessel or vessels being pushed ahead, in addition to the lights prescribed in paragraph (f).

(m) For the purpose of paragraph (h), within the Canadian waters of a roadstead, harbour, river, lake or inland waterway, where it is impracticable for a log tow to comply with paragraph (g), the log tow shall exhibit

- (i) if it is less than 25 metres in breadth, one all-round white light at or near the forward end and one at or near the after end,
- (ii) if it is less than 25 metres in breadth and exceeds 100 metres in length, one additional all-round white light at or near the mid-point of the length,
- (iii) if it is 25 metres or more in breadth, a total of four all-round white lights, one at or near each corner, and
- (iv) if it is 25 metres or more in breadth and exceeds 100 metres in length, an additional all-round white light at or near the mid-point of each side of the length.

Rule 25 - Sailing Vessels Underway and Vessels Under Oars — International

(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.

(d)(i) A sailing vessel of less than seven metres in length shall, if practicable, exhibit the lights prescribed in paragraph (a) or (b) of this Rule, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.

- (ii) A vessel under oars may exhibit the lights prescribed in this Rule for sailing vessels, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.

€ 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.

Sailing Vessels Underway and Vessels Under Oars — Canadian Modification

(f) Notwithstanding paragraph (e), in the Canadian waters of a roadstead, harbour, river, lake or inland waterway, a vessel of less than 12 metres in length proceeding under sail when also being propelled by machinery is not required to exhibit a conical shape, apex downwards, but may do so.

Rule 26 - Fishing Vessels

(a) A vessel engaged in fishing, whether underway or at anchor, shall exhibit only the lights and shapes prescribed in this Rule.

(b) A vessel when engaged in trawling, by which is meant the dragging through the water of a dredge net or other apparatus used as a fishing appliance, shall exhibit:

- (i) two all-round lights in a vertical line, the upper being green and the lower white, or a shape consisting of two cones with their apexes together in a vertical line one above the other,
- (ii) a masthead light abaft of and higher than the all-round green light; a vessel of less than 50 metres in length shall not be obliged to exhibit such a light but may do so,
- (iii) when making way through the water, in addition to the lights prescribed in this paragraph, sidelights and a sternlight.

(c) A vessel engaged in fishing, other than trawling, shall exhibit:

- (i) two all-round lights in a vertical line, the upper being red and the lower white, or a shape consisting of two cones with their apexes together in a vertical line one above the other,
- (ii) when there is outlying gear extending more than 150 metres horizontally from the vessel, an all-round white light or a cone apex upwards in the direction of the gear,
- (iii) when making way through the water, in addition to the lights prescribed in this paragraph, sidelights and a sternlight.

(d) The additional signals described in Annex II apply to a vessel engaged in fishing in close proximity to other vessels engaged in fishing.

(e) A vessel when not engaged in fishing shall not exhibit the lights or shapes prescribed in this Rule, but only those prescribed for a vessel of her length.