APPENDIX V

ST LAWRENCE RIVER - TRANSIT OF WIDE-BEAM VESSELS AND LONG VESSELS IN THE QUÉBEC-MONTRÉAL SEGMENT

Definitions:

In the Québec-Montréal segment

Wide-beam vessel means a vessel whose overall length does not exceed 300·0 metres and whose width is equal to or greater than 32·5 metres, but not exceeding 44·0 metres.

Long vessel means a vessel whose overall length is between 270·0 and 300·0 metres and whose width does not exceed 44·0 metres.

Effective date: Spring 2013.

This notice authorizes ***wide-beam*** and ***long*** vessels to safely navigate the St. Lawrence waterway between Québec and Montréal.

Mariners are requested to refer to the Notices to Mariners monthly edition at www.notmar.gc.ca - Edition 4 and chart VN-301. These documents explain which segments pose a risk. They are available on the Canadian Coast Guard, Central and Arctic Region website at www.marinfo.gc.ca.

This notice describes vessel transit conditions for:

1) Ice navigation **(G)**;
2) Meeting in risk areas **(R)**;
3) Overtaking in risk areas **(D)**;
4) Anchorage areas **(M)**.

1) Ice navigation (G)

G-1: The Corporation of Mid St. Lawrence Pilots (CMSLP) must appoint a liaison officer to work with the Ice Operations Centre in coordinating information on any ice-related risks that may be present during the transit of a ***wide-beam*** or ***long*** vessel.

G-2: ***Wide-beam*** and ***long*** vessels must wait for favourable conditions before proceeding through the waterway between Québec and Montréal, in accordance with the CCG Ice Operations Centre notices or directives. Accordingly, vessels must comply with the following conditions:

a) For an up bound vessel destined for the Québec-Montréal segment: At Île Blanche, the CMSLP pilot will notify the CCG Ice Operations Centre of the vessel's estimated time of arrival (ETA) at the Québec pilot station, as well as report on how the vessel is handling in the ice. The CCG Ice Operations Centre will then contact the CMSLP liaison officer and together they will assess the ice conditions, including weakened or unstable fast ice, with a view to determining whether dislodged ice floes could pose problems to shipping during the vessel's transit between Québec and Montréal;

b) Before a vessel leaves her berth, bound for the Québec–Montréal segment: the CMSLP liaison officer must contact the CCG Ice Operations Centre so that they together may assess the ice conditions, including any weakened or unstable fast ice, with a view to determining whether dislodged ice floes could pose problems to shipping during the vessel's transit in the Québec–Montréal segment.

G-3) ***Wide-beam*** and ***long*** vessels which, given their operational conditions, appear unable to overcome the forces exerted by the ice, whether due to:

- mechanical problems;
- problems with the propulsion system;
- limitations resulting from the types of propulsion system programming;
- or other,

shall not proceed upriver from Québec before the systems in question are re-established, in order to ensure safe passage at confined areas of the river.

G-4) When there is ice under pressure, as determined by the CCG Ice Operations Centre and the CMSLP liaison officer, ***wide-beam*** and ***long*** vessels must proceed under the Québec bridges with the tidal currents.

G-5) In the Lac St-Pierre sector, pilots must give preference to the meeting of vessels during daylight and under good visibility in order to clearly perceive vessel movement, the ice conditions and whether wake from passing vessels could result in the risk of fast ice breaking off.

2) Directives concerning the meeting of vessels in medium and high-risk areas (R)

R-1) Meetings are prohibited in high-risk areas. The high-risk areas between Québec and Montréal for vessels with a combined nominal breadth of between 65 and 72·6 metres and between 72·61 metres and 88 metres are identified on chart VN-301.

Specific sector: Contrecoeur course

a) The **Contrecoeur course** sector is identified as a study sector for meetings of ***wide-beam*** vessels of a combined nominal breadth of between 72·6 metres and 88 metres. Though, a priori, meetings are prohibited, pilots will be able to meet other ***wide-beam*** vessels under favourable conditions. Before their vessels meet, the pilots must notify MCTS of the manoeuvres they have agreed on.

b) Within 10 days following the meeting, the CMSLP must provide CCG and TC authorities with a report describing the vessels' condition, the passage conditions, the environmental factors, the manoeuvring conditions and all relevant comments on how the vessels handled when they met.

R-2) Medium-risk areas are assessed by pilots to determine whether vessels may be able to safely meet where one or more of the factors listed below apply:

a) The medium-risk areas between Québec and Montréal for vessels with a combined nominal breadth of between 65 metres and 72·6 metres and between 72·61 metres and 88 metres are identified on chart VN-301. Before their vessels meet, the pilots must notify MCTS of the manoeuvres they have agreed on.

b) Within 10 days following the meeting, the CMSLP must provide CCG and TC authorities with a report describing the vessels' condition, the passage conditions, the environmental factors, the manoeuvring conditions and all relevant comments on how the vessels handled when they met.

c) In assessing the risks associated with the meeting of vessels, pilots must take the following factors into consideration:

1) Nighttime navigation: Darkness makes it more difficult to evaluate distances, background light can be confused with ship's navigation lights and aids to navigation, beacons are fewer and unlit in winter and the effect of wave action from passing vessels on shorelines is difficult to observe;

2) Visibility: When vessels meet, the visibility must be sufficient for the pilots to visually assess the approach between the two vessels. Pilots must take into consideration that aids to navigation have a theoretical availability (75% availability) of 4·3 nm and that buoys can be hidden under the ice cover;

3) Wind velocity and direction: Under certain vessel load conditions, wind direction and velocity (above 35 knots) can influence vessel manoeuvrability;

4) Manoeuvring distance: The pilot must ensure that he/she has sufficient distance to complete the manoeuvre and re-establish the course before the next medium - or high-risk area;

5) Marine traffic: The pilot must ensure that there are no other vessels manoeuvring to overtake or meet in the sector and must also consider recreational boating and other nautical activities. All manoeuvre agreements made between vessels that contradict these directives must be communicated to the sector's MCTS;

6) Vessel characteristics: The pilot must ensure that the vessel's manoeuvring characteristics and the distance separating the vessels are sufficient to counter the interaction effects between them;

7) Passage under overhead cables and bridges: In order to ensure safe passage, the pilot must make certain that he/she has the exact data on the vessel's draught and on the vertical clearance of any electrical lines and bridges at the place of passage;

8) Towing and dredging operations: MCTS must provide pilots with information on towing and dredging operations being carried out so that the pilot may adequately assess the situation and plan the vessel's passage;

9) Channel characteristics: The pilot must take into consideration the channel configuration, type of bottom, currents and tides.

Specific sectors: Portneuf Bend, Sorel-Tracy Bend and Pointe à la Citrouille

In the context of a meeting with a tanker, the pilot must ensure that the angle of incidence on the tanker's longitudinal axis is under 30° in order to increase the likelihood (in the event of a collision) of a ricochet effect on the broadside of the vessel instead of perforating her double hull.

R-3) Speed control: In the context of a meeting of vessels that are subject to speed controls because of their draught, the pilots must adjust the prescribed speed so as to increase the safety margin by 50% more than that prescribed in the CCG underkeel clearance table, without, however, exceeding a speed over water (SOW) of 9 knots.

R-4) Meetings with long vessels are prohibited in the following areas (chart VN-301):

- Sainte-Croix Bend
- Barre à Boulard
- Cap Charles Bend
- Cap-à-la-roche Bend
- Champlain Bend
- Bécancour Bend
- Île de Grâces Bend
- Belmouth Bend
- The segment between Cap Saint-Michel and Île aux Vaches
- The downstream sector of Tétreauville

3) Directives on overtaking in medium- and high-risk (D)

D-1) Overtaking is prohibited in high-risk areas. The high-risk areas between Québec and Montréal for vessels with a combined nominal breadth of between 65 metres and 72·6 metres and between 72·61 metres and 88 metres are identified on chart VN-301.

D-2) Medium-risk areas are assessed by pilots to determine whether a vessel may be able to safely overtake another where one or more of the factors listed below apply:

a) The medium-risk areas between Québec and Montréal for vessels with a combined nominal breadth of between 65 metres and 72·6 metres and between 72·61 metres and 88 metres are identified on chart VN-301. Before a vessel overtakes another, the pilots must notify MCTS of the manoeuvres they have agreed on;

b) Within 10 days following the meeting, the CMSLP must provide CCG and TC authorities with a report describing the vessels' condition, the passage conditions, the environmental factors, the manoeuvring conditions and all relevant comments on how the vessels handled when they met;

c) In assessing the risks associated with overtaking a vessel, pilots must take the following factors into consideration:

1) Nighttime navigation: Darkness makes it more difficult to evaluate distances, background light can be confused with ship's navigation lights and aids to navigation, beacons are fewer and unlit in winter and the effect of wave action from passing vessels on shorelines is difficult to observe;

2) Visibility: When a vessel overtakes another, the visibility must be sufficient for the pilots to visually assess the approach between the two vessels. Pilots must take into consideration that aids to navigation have a theoretical availability (75% availability) of 4·3 nm and that buoys can be hidden under the ice cover;

3) Wind velocity and direction: Under certain vessel load conditions, wind direction and velocity (above 35 knots) can influence vessel manoeuvrability;

4) Manoeuvring distance: The pilot must ensure that he/she has sufficient distance to complete the manoeuvre before the next medium- or high-risk area;

5) Marine traffic: The pilot must ensure that there are no other vessels manoeuvring to overtake or meet in the sector and must also consider recreational boating and other nautical activities. All manoeuvre agreements made between vessels that contradict these directives must be communicated to the sector's MCTS;

6) Vessel characteristics: The pilot must ensure that the vessel's manoeuvring characteristics and the distance separating the vessels are sufficient to counter the interaction effects between them;

7) Passage under overhead cables and bridges: In order to ensure safe passage, the pilot must make certain that he/she has the exact data on the vessel's draught and on the vertical clearance of any electrical lines and bridges at the place of passage;

8) Towing and dredging operations: MCTS must provide pilots with information on towing and dredging operations being carried out so that the pilot may adequately assess the situation and plan the vessel's passage;

9) Channel characteristics: The pilot must take into consideration the channel configuration, type of bottom, currents and tides.

D-3) Speed control: When planning to overtake another vessel, the pilot must obtain the authorization of the vessel to be overtaken. The vessels will adjust their speeds to obtain, ideally, a ratio of 2:1 (twice the speed) in order to minimize the interaction effects between the vessels. However, the overtaking vessel must not maintain a speed that could lead to accelerated shoreline erosion or cause shoreline property damage.

D-4) Overtaking long vessels is prohibited in the following areas (chart VN-301):

- Sainte-Croix Bend
- Barre à Boulard
- Cap Charles Bend
- Cap-à-la-roche Bend
- Champlain Bend
- Bécancour Bend
- Île de Grâces Bend
- Belmouth Bend
- The segment between Cap Saint-Michel and Île aux Vaches
- The downstream sector Tétreauville

4) Directives concerning anchorage areas(M)

M-1) No anchoring of wide-beam or long vessels at the Pointe-aux-Trembles (PAT) anchorage, except under exceptional circumstances.

M-2) No wide-beam or long vessels may use the long-term anchorage areas in the sector of the waterway between Québec and Montréal.

M-3) The holding anchorage areas authorized for wide-beam or long vessels are the following: Québec/Saint-Nicolas, Trois-Rivières and Sorel/Lanoraie.

M-4) If wide-beam or long vessels use an authorized holding anchorage area, the avoidance radius of the anchorage point must not adversely affect traffic or make it deviate.

Source: notmar.gc.ca Q0227/2013