

Canada

TP 13681 E

## **GUIDELINES**

### FOR

## NAVIGATION UNDER THE **CONFEDERATION BRIDGE**

MARINE SAFETY **TRANSPORT CANADA** ATLANTIC REGION

01 DECEMBER 2003



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#### 1.0 Introduction

1.1 The Confederation Bridge (the Bridge) provides a road transportation link between Canada's mainland and the island province of Prince Edward Island pursuant to the **Prince Edward Island Terms of Union**. The Northumberland Strait (the Strait) is a navigable body of water and the Bridge was built in accordance with permits issued pursuant to provisions of the **Navigable Waters Protection Act**, which preserves the navigation rights of vessels that have traditionally used these waters.

1.2 Vessels of over 1,500 Gross Register Tonnage (GRT) are required to utilize the central navigation channel. Local vessels, 1,500 GRT and under, that are engaged in local traffic, may utilize the designated "near shore" navigation channels located on either side of the Strait.

1.3 The Bridge has been designed to meet a government prescribed Safety Index of 4.25 - this is also known as the Beta  $(\beta)$  factor. The Safety Index is affected by the frequency, speed and displacement of the vessels that use the Strait.

1.4 The central navigation channel, as defined in 3.1, is a compulsory pilotage zone pursuant to regulations made under the Pilotage Act. These regulations became effective on 1 October 1997. Pilotage is compulsory for all foreign vessels and for all Canadian vessels over 1,500 GRT, as defined in the Atlantic Pilotage Authority Regulations.

1.5 The Northumberland Strait is a body of water that is subject to seasonal ice conditions and, because of the presence of the Bridge, vessels are not able to utilize the "shore leads" within ten miles on each side of the Bridge and must use the designated central navigation channel. In order to protect both the ship and the pier from damage due to allisions, the transiting vessel will require icebreaker support for the transit under the Bridge and ten (10) nautical miles each side. In order to avoid dangerous situations developing, Transport Canada (TC) and the Department of Fisheries and Oceans through the Canadian Coast Guard (CCG) may declare the Northumberland Strait an active ice control zone and, when conditions warrant, prohibit entry of vessels into the Strait pending the arrival of an icebreaker escort.

1.6 Traffic in the Northumberland Strait in the area of the Bridge is regulated by the Vessel Traffic Services Zones Regulations.

1.7 When the Strait is declared an active ice zone and ice is present in the navigation channel the transiting vessel must be escorted by a suitably sized icebreaker.

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1.8 Any inquiries or comments on these guidelines should be addressed to:

Regional Director, Marine Transport Canada Atlantic Region 45 Alderney Drive PO Box 1013 Dartmouth, N.S. B2Y 4K2

Telephone:(902) 426-2060Fax:(902) 426-6092

#### 2.0 Short Title

These guidelines may be cited by the short title "The Confederation Bridge Navigation Guidelines".

#### 3.0 Definitions

3.1 For the purpose of these Guidelines:

"Central navigation channel" is located between pier P21 located at position 46<sup>°</sup> 12' 38.99" N, 63<sup>°</sup> 45' 04.02" W and pier P22 located at position 46<sup>°</sup> 12' 32.85" N, 63<sup>°</sup> 45' 11.62" W. These piers are identified on each side by fairway buoys, RACONs, daybeacons, red and green pier lights, centre span lights and sector lights. Details can be found in Annex 1 of these Guidelines, CCG publication *List of Lights, Buoys and Fog Signals* and on Canadian chart number 4406.

3.2 "Local traffic" and "local vessels" make reference to any vessels under 1,500 GRT operating from ports located in the Northumberland Strait Area.

#### 4.0 Application

4.1 The Confederation Bridge Navigation Guidelines apply to all vessels intending to transit under the bridge or navigating in its proximity.

4.2 These guidelines are not intended to replace any applicable regulations pursuant to the Canada Shipping Act. However, they are intended to bridge the gap and provide specific recommendations promoting increased safety of shipping and protection of life,

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property and the marine environment.

4.2 The effective date for implementation of the guidelines is 1 December 2003

#### 5.0 General Guidelines for All Vessels

5.1 No vessel should transit the Bridge in inclement weather or ice conditions, which prejudice its navigability to such an extent that it is unable to fully control and maintain its course, speed, and directional stability during the transit.

5.2 No vessel should transit the Bridge in conditions of reduced visibility of less than ten (10) vessel lengths.

5.3 No person should navigate or operate any vessel in a manner that is dangerous to any person, property, that vessel, or any other vessel, having regard to all circumstances, including nature and condition of the waters being navigated, and use that is or might reasonably be expected to be made in those waters.

5.4 Navigation may be prohibited or limited for periods when the Strait is declared to be an active ice control zone by TC/CCG. All vessels seeking transit under the Bridge when ice is present in Northumberland Strait must check with CCG Ice Operations by contacting Northumberland Traffic or Ecareg Canada.

5.5 When the Strait is declared an active ice control zone and ice is present in the navigation channel the vessel must be escorted by a suitably sized icebreaker for the transit under the bridge and for ten (10) nautical miles each side.

5.6 No vessel over 500 GRT, solely propelled by sail, should transit the Bridge.

5.7 All vessels should comply with the Vessel Traffic Services Zones Regulations.

5.8 All vessels of 20 metres or more in length should maintain a continuous listening watch on channel 16 and channel 12 VHF between East Point and West Point, Prince Edward Island.

5.9 In addition to the reports made pursuant to the Vessel Traffic Services Zones Regulations, vessels subject to the regulations should, when intending to proceed within five (5) nautical miles of the Bridge, also report to Northumberland Traffic:

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- ETA fairway buoy.
- Draft, displacement in tons, air draft and name of local agent if not registered in Canada.
- When the vessel has an accident or a malfunction of its machinery, equipment or a deficiency in its crewing that may impair its safe navigation.
- Where an obstruction or other hazard is identified in the navigation channel.
- In the case of a towing vessel, where the towing vessel is having or anticipating difficulty in controlling its tow.
- 5.10 Towing vessels:
  - Should not drop anchor or anchor its tows in such a manner that they may swing across the central navigation channel.
  - Should not, when engaged in arranging its tow, obstruct the navigation of other vessels.
  - Should shorten its towing arrangement to the shortest extent possible without compromising safety. When the towline exceeds 75 metres a suitably sized tug should be secured to the stern of the last vessel being towed.

#### 6.0 Navigation Guidelines for Vessels Over 1,500 GRT

6.1 The navigation route for vessels over 1,500 GRT transiting the Confederation Bridge is through the central navigation channel.

6.2 Vessels should approach and follow the course line extending between the two Strait Crossing fairway buoys (private) light list numbers 1017.7 and 1017.75.

6.3 The waters five (5) nautical miles either side of the Bridge are designated as an area of alternating one way traffic for vessels having a tonnage in excess of 1,500 GRT. Except in emergencies or if required during ice breaking operations no such vessel should

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overtake another such vessel, meet such another vessel, "come about" or anchor within one quarter (1/4) mile either side of the centerline of the central navigation channel.

- 6.4 Restrictions for vessels transiting the central navigation channel:
  - 6.4.1 <u>Maximum Displacement</u>

Passenger vessels33,500 long tonsCargo vessels47,000 long tons

#### 6.4.2 Maximum Speed

- Passenger vessels: 11 knots over the ground within two (2) nautical miles of the Bridge
- Cargo vessels: 8 knots over the ground within two (2) nautical miles of the Bridge

The speed of a vessel transiting may be increased:

- when the bow is under the span and the vessel is on track, or
- when circumstances demand, in order to maintain steerage of the vessel to keep it on track

6.4.3 <u>Maximum air draft (higher high water, large tides)</u> - 48 metres

# 7.0 Navigation Guidelines for Vessels 1,500 GRT and Under – Transiting the Near Shore Navigation Channels

7.1 Local vessels 1,500 GRT and under, that are engaged in local traffic, may utilize the designated "near shore" navigation channels located on either side of the Strait.

7.2 The near shore navigation channels are designated between piers P3 and P4, P4 and P5, P42 and P43, P43 and P44. Piers are located as follows:

P3) 46<sup>°</sup> 14' 33.29" N, 63<sup>°</sup> 42' 53.76" W

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	46 <sup>°</sup> 14' 26.92" N, 46 <sup>°</sup> 14' 20.55" N,	
P43)	46 <sup>°</sup> 10' 36.07" N, 46 <sup>°</sup> 10' 30.16" N, 46 <sup>°</sup> 10' 24.23" N,	

7.3 Restriction for vessels transiting the near shore channels:

7.3.1 Maximum Speed over ground - 11 knots

7.3.2 Maximum air draft (higher high water, large tides) - 28 metres

#### 8.0 Temporary Instructions and Prohibitions

8.1 Notwithstanding anything in these Guidelines where, in the opinion of the Regional Director, Marine, compliance would be impossible, impracticable or unsafe, or would cause a risk of pollution because of route obstructions, a casualty, an accident on the bridge, the weather, ice conditions, water levels, or other unforeseen or temporary circumstances, the Regional Director, Marine may instruct vessels to proceed in a certain manner or by a certain route, or to anchor in a certain place or prohibit vessels from proceeding or anchoring.

8.2 Special requests to transit under the Confederation Bridge by vessels not conforming to these guidelines must be submitted in writing to the Regional Director, Marine at least thirty (30) days before the planned transit. This submission must contain the following:

- Name of vessel
- IMO number
- Displacement tonnage
- Maximum air draught
- Maximum breadth
- Maximum draught
- Name of local agent if not registered in Canada

The Regional Director, Marine may require additional information and/or arrangements before transit is permitted.

