

Towards a Canadian Policy on Places of Refuge for Ships in Need of Assistance

Abstract

Until the latter part of the twentieth century, technological improvements and safety considerations in the commercial maritime industry were slow and lumbering in pace. This was a period when sea trade expanded in support of the global economy. This led to fresh innovations and new technology inspired radical developments in ship design.

The M. T. Exxon Valdez accident in Alaska in March 1989 was an environmental catastrophe which jolted North America and led to the U.S. Oil Pollution Act of 1990. The Act propelled the International Maritime Organization (IMO) to follow suit, causing a domino effect on all major maritime nations. The recent incidents of the M. T. Erika, the M. T. Castor, and the M. T. Prestige off the West European Coast, brought the discussion on places of refuge for ships in need of assistance to the forefront of international debate. The adoption by the 23rd Assembly of the IMO in November 2003, of two resolutions on the issue of “Places of Refuge” was an important step in formulating guidelines for decision-making involving incidents leading to the need for ‘Safe Harbour’ and acknowledged the critical nature of the topic.

Canada has no defined national policy to deal with incidents of gross social, environmental, political and economic impact, such as the M. T. Prestige. The gargantuan (and rapidly growing) volume of seaborne trade in North America, would seem to suggest that it is time to take stock of the realities of the lessons of recent history and consider the need for formulating a viable, enforceable and acceptable national policy on “Places of Refuge for Ships in Need of Assistance”. This paper explores and develops such a policy.

Introduction

Transport Canada's policy planning document of February 2003, *Straight Ahead: A Vision for Transportation in Canada*,¹ outlines the federal government's strategic direction for transportation decision-making. This vision includes international maritime shipping off Canada's extensive coastline and notes the potential political, economic, environmental and social consequences of persistent oil spills from tankers such as the M. T. Prestige, which sank off the Galician coast of Spain.² The issue of places of refuge for ships in need of assistance became a hotly debated international subject after this casualty, which followed on the heels of the M. T. Erika in December 1999 and the M. T. Castor in January 2001.

With 243,792 kilometres of coastline (including islands) bordering three oceans, and another 9,500 kilometres along the Great Lakes, Canada has the longest coastline in the world. Its exclusive economic zone (EEZ) covering 3.7 million km² combined with the second largest national continental shelf, makes Canada's total offshore area around 6.5 million km². Despite the vast spread of its coastlines, Canada has not designated places of refuge for ships in need of assistance nor adopted a national policy to deal with requests for places of refuge. However, there is a process currently under way to develop a Canadian approach.³ North America's extensive seaborne trade and stringent legislative and regulatory framework make imperative the formulation of a Canadian national policy on places of refuge for ships in need of assistance.

The IMO Guidelines for Places of Refuge for Ships in Need of Assistance (IMO Guidelines) and the Maritime Assistance Service (MAS) Resolution provide a framework for decision-making by coastal authorities in relation to requests by the shipowner or salvor to enter a place of refuge.⁴ The *Straight Ahead* report recognizes the vital necessity of such a framework and the need to tailor responses to Canada's unique geography, environment, and social and political institutions.⁵ Implementing the IMO Guidelines in Canada would mean that the impact of the potentially damaging and expensive accident scenarios, while inevitable, could be contained and mitigated by effective preparation and response.

This paper will examine the issues to be considered in developing a Canadian policy on places of refuge for ships in need of assistance and will evaluate the operational, legal and regulatory viability of such a policy in the Canadian context. It will conclude with suggestions for a federal policy framework while promoting the concept of integration of a Canadian national policy on places of refuge with the ongoing measures to improve the efficiency, competitiveness, security and sustainability of Canadian ports.

Setting the Stage

Canada has had significant experience with ships in distress seeking refuge in its ports or waters.⁶ As early as 1883, the Exchequer Court encountered a case concerning a vessel entering a Canadian port for shelter and as a place of safety.⁷ Recent incidents highlight the importance of the subject in the Canadian context and the need to put a risk assessment process in place.

In July 1989, the German-flagged bulk carrier M. V. Trave Ore struck an iceberg at full speed (12 knots) in dense fog, 158 nautical miles east of Belle Island, Newfoundland, en route to Hamburg, Germany.⁸ Refuge in Canadian waters was requested. The damaged ship was initially refused refuge but was subsequently permitted to enter Canadian waters to undertake repairs. Damage to the forepeak tank, No. 1 port wing tank, and No. 1 cargo hold cost US\$ 4 million to repair.

In December 2000, the 127,000 gross ton, Panamanian-flagged, 1976-built, tanker M. T. Eastern Power began leaking some of its 1.9 million barrels of crude oil through a crack in the hull, while en route to Come-by-Chance, Newfoundland, from Egypt.⁹ Refuge in Canadian waters was requested, to discharge the cargo and effect repairs. Transport Canada instructed the vessel not to enter Canada's 200-nautical mile Exclusive Economic Zone (EEZ) until the captain could prove the vessel was not leaking any more oil. The ship was stranded about 500 kms. southeast of Newfoundland for several days. Transport Canada later allowed the ship to enter Canadian waters,

under strict conditions. The crew agreed to transfer all remaining oil from the leaking tank into other storage tanks and assured the Canadian government that no more oil would be spilled. Later, the ship's manager (World-Wide Shipping Agency of Singapore), instructed the captain to leave Canadian waters and to head south towards the Caribbean, where the cargo was eventually discharged and sold at St. Eustatius, Netherlands Antilles.¹⁰

In March 2001, the Japanese-built container ship M. V. Kitano was 15 nautical miles south of Halifax, Nova Scotia, when a fire broke out on its foredeck.¹¹ Battling a fierce storm, the 50,000-tonne, 280-metre long ship, carried 2,100 containers of various items, including cigarettes and machinery. The fire started in a container of carbon powder and soon encompassed two levels of the container stack. Permission to enter the Port of Halifax was requested to effectively fight the fire, determine the cause, prevent a recurrence and effect repairs. The federal Department of Transport determined that the ship was unsafe because it was loaded with dangerous goods. The ship's crew brought the fire under control the next day.¹² The ship's captain was instructed by federal authorities (Transport Canada) not to come into the Port of Halifax, and it was not until the weather cleared enough for a harbour pilot to reach the ship and evaluate its condition, that the vessel was allowed to enter port.

These incidents show that the issue of a policy on places of refuge is relevant for Canada. Other recent high profile cases where a lack of direction and foresight severely exacerbated a controllable set of circumstances and led to environmental catastrophes and economic impacts of gross magnitude highlight the vital role that a policy will play in protecting Canada's maritime interests.

The Context for a Canadian Policy on Places of Refuge for Ships in Need of Assistance

Regional Diversity

Canadians depend on their littoral, riparian and estuarine environments. Historically, Canada has had a vibrant maritime tradition that is dependent on maritime transportation and resource-based industries such as fisheries and offshore oil and gas production. Approximately 100,000 vessels transit Canadian waters annually, transporting more than 360 million tonnes of goods with a commercial import/export value of approximately CDN\$ 85 billion. These statistics, however, mask the significant variations between the coasts with respect to the type of marine traffic that would precipitate the need for a place of refuge. Although 62 percent of domestic marine activity takes place in the Great Lakes and St. Lawrence River region,¹³ these waters do not involve ships in transit as all ships would be calling at a Canadian or a United States port and would be subject to the port state control of one or both of these countries. Canada can, therefore, ensure a high quality of ships in this region, obviating the need for places of refuge requests. Existing safety and spill response regimes will govern any necessary remedial actions.

Of the remaining domestic marine activity in Canada, about 11 percent occurs in the Atlantic region and 25 percent in the Pacific region. Requests for a place of refuge are most likely on these coasts. Prevailing oceanographic and meteorological conditions differ between the coasts and have a bearing on the degree of risk to the coastal environment and hence to a place of refuge policy. On the east coast, maritime traffic is primarily crude oil and petroleum products, as well as container traffic. As oil and natural gas exploration, development and production activities on the east coast (and in the Arctic) are expected to grow significantly in the coming decades, a places of refuge policy should consider the ramifications of associated maritime traffic and the potential for pollution incidents. Exports of bulk raw materials (e.g., sulphur, coal and wheat) and forest products, as well as container traffic, dominate the Pacific coast trade. The Pacific region accounts for over one-third of Canadian international trade, with the ratio of exports to imports being 9 to 1.¹⁴ Increasing container traffic, combined with ever larger and faster

container ships (with stores of bunker oil), points to an increasing potential for places of refuge requests, particularly on the east coast.

The Canadian Arctic archipelago (covering 1.4 million km²) currently has negligible commercial traffic. However, if increased maritime traffic in the region becomes a possibility, the places of refuge issue will become relevant. Canada enforces the regulations and standards under the *Canada Shipping Acts* of 1985¹⁵ and 2001¹⁶ and the stricter *Arctic Waters Pollution Prevention Act, 1970*¹⁷ in these waters. Currently, the situations that may lead to a place of refuge request in the Canadian Arctic are remote and, in any case, moving a vessel out to sea through these ice-infested Arctic waters would be dangerous and impractical.

Canadian Federalism

Canada is a constitutional monarchy with a parliamentary system based on the British model. Canada's unique federal/provincial/local jurisdictional structure and distribution of powers is laid out in the *Constitution Act, 1867*.¹⁸ The federal parliament has jurisdiction over navigation, shipping and fisheries, defence, relations with other states and the authority to enter into international treaties.¹⁹ When it comes to implementing international treaties, the federal government must ensure that it has the consent of the provinces and territories to co-operate in implementing treaties falling under provincial responsibility. Provincial governments have jurisdiction for resource management within their borders, including intra-provincial trade and commerce, and environmental conservation and protection. The jurisdiction of energy resources and management is divided between the federal and the provincial governments. Municipal governments (cities, towns, villages and metropolitan regions) may also have powers (bestowed by their provincial legislatures) over marinas, parks, recreational sites, wetlands, beaches and nearshore areas (including cleaning and disposal of waste).

Although a federal government agency would process a request for refuge and monitor the stricken vessel's progress through Canadian waters, the consequences of granting or denying refuge may fall

within the purview and responsibility of both the federal and the provincial governments. Beyond the navigable waters on the landward side, jurisdictional authority shifts from the federal government to the provincial government or to local governing bodies or agencies. Granting a place of refuge to a ship in need of assistance inevitably involves the possibility of environmental damage to coastal communities, navigation and shipping, marine protected areas, land-based ecosystems, aquaculture, fish stocks, wildlife and migratory birds, with potentially immense economic consequences. The question of compensation for losses suffered and its administration in terms of equitable distribution to federal, provincial and local government agencies, as well as private interests, thus has a bearing on the division of responsibilities. The need for uniformity in Canadian maritime law has repeatedly been emphasized by the Supreme Court of Canada.²⁰ The possibility of the Canadian discussion on places of refuge being complicated by overlapping and intervening jurisdictions is quite likely. Hence, streamlining and harmonizing federal and provincial responsibilities is a necessary consideration in the formulation of a Canadian places of refuge policy.

Canada's Emerging Oceans Management Framework

Coastal states have a duty to use and manage the world's oceans sustainably.²¹ All levels of government share this responsibility for protecting and preserving the marine environment. Co-operation and collaboration, not only internally, but also with neighbouring states are necessary. In Canada, at least 23 federal legislative acts and 21 federal departments and agencies play a role in the management of the oceans.²² Beyond this federal regime there are a multitude of provincial or territorial acts that again concern marine matters. A viable policy on places of refuge for ships would be a significant component of Canada's oceans management regime.

Canada's oceans management strategy is outlined in the *Oceans Act, 1997*²³ and is based on the premise that the oceans must be managed as a collaborative effort among stakeholders.²⁴ The fundamental principles of the national strategy are sustainable development,

integrated management and the precautionary approach. The consolidation of federal responsibilities under one organization (Department of Fisheries and Oceans, DFO, also known as Fisheries and Oceans Canada), with the Canadian Coast Guard (CCG) acting as the lead federal agency accountable for oceans management, is a direct manifestation of the pursuit of integrated oceans management and a need to rationalize fleet resources. The DFO is also responsible for providing coast guard services and hydrographic services, as well as protection of the marine environment (shared with the Department of the Environment, also known as Environment Canada), the facilitation of maritime trade, commerce and accessibility (shared with the Department of Transport, also known as Transport Canada), and the advancement of marine science. Canada has sought to protect the marine environment and marine resources through the delineation of areas for conservation. The varied environmental conservation practices add another level of complexity to developing a places of refuge policy, which must be sensitive to these special areas and create appropriate safeguards, while ensuring the advancement of economic activity.

The complex mechanisms driving climate change also impact oceans management and the places of refuge discussion in Canada. The rising surface water temperatures caused by global warming and the entrapment of solar heat in the earth's atmosphere could clear the way for higher volumes of maritime traffic in the Canadian Arctic due to an increased expanse of open, ice-free waters. The various northern channels that collectively constitute the Northwest Passage could become a major trans-ocean trade route (especially for fossil fuel supplies from Russia, the Canadian Arctic and Alaska). Furthermore, the rising water levels caused by the melting ice floes and Arctic glaciers could alter the ecology, the ecosystems and the physical features of inland and coastal waters, necessitating a re-evaluation of the suitability of potential place of refuge sites. A national policy on places of refuge will therefore have to be flexible and adaptable to the dynamic and changing conditions caused by such natural phenomena.

Oceans management in Canada aspires for a methodical and systematic arrangement of governing structures and decision-making institutions and policies for the preservation and protection of Canada's resources, while promoting economic development. A places of refuge policy will have to balance the protection of the marine environment and conservation and sustainable use of marine resources with the goal of ensuring that a ship in need of assistance is granted access to a safe haven.

Port Administration Considerations

A place of refuge policy for Canada will have to accommodate the various port authority mechanisms, and their potentially overlapping jurisdictions. Canada's public port governance structures consist of:

- a) Port Authorities: 19 independently managed and self-sufficient major ports deemed essential to domestic and international trade. These ports do not receive government appropriations.
- b) Harbour Commissions: Regional and local ports with various degrees of federal, provincial, municipal, community, local and private governance and ownership. The phased divestiture and privatization of these ports is ongoing.
- c) Transport Canada Ports: Small commercial ports and 32 ports in communities in remote regions. These ports are owned and administered by Transport Canada and have not been divested.²⁵

The process of divestiture of Canada's 369 commercially designated public ports was made a matter of national priority under the *Canada Marine Act, 1998*.²⁶ The different organizational structures and administration frameworks of these diverse port governance systems and their varying degrees of autonomy will increase the complexity of any places of refuge policy promulgated by Canada. Furthermore, although Canada does not have any specifically designated places of refuge, the *Canada Marine Act, 1998* allows the removal, destruction or disposal of any ship, part of a ship, structure, work or other thing

that interferes with navigation in a port and provides for the recovery of the costs incurred.

Overlapping jurisdictions in the navigable waters of a Canadian port have the potential to create conflict and confusion. The pollution prevention officer (*Canada Shipping Act, 1985*²⁷ and *Canada Shipping Act, 2001*²⁸), the port authority (*Canada Marine Act, 1998*²⁹) and the port administration (*Marine Transportation Security Act, 1994*³⁰) have all got responsibilities in Canadian ports, creating the potential for conflicting directions and recondite chains of command. A national places of refuge policy will need to vest one agency with the overriding power to direct ships, ports, response personnel and all interested parties.

Canada's port management framework is in the process of evolution and is subject to the authority of various government departments and agencies. A place of refuge policy will have to be mindful of the potential for conflict and confusion thus created and seek to unify and harmonize the decision-making process, in the interests of the ports, state and local authorities, coastal communities, and the ship in need of assistance. The places of refuge policy should be integrated with the measures currently being put in place to improve the efficiency, competitiveness, security and sustainability of Canadian ports.

General International Law and Policy Considerations

From the historical perspective, the right of ships to seek refuge when in distress, either in the waters of its own flag state or in the waters of any other state, has been universally accepted as necessary and acknowledged as such in various international instruments. Canada's treaty obligations, therefore, reaffirm Canada's duty to render maritime assistance and Canada has put such systems in place.

Such assistance also extends to health issues. International health regulations discourage the denial of entry to ports of ships carrying persons with infectious diseases. Canada, with a rapidly growing cruise industry on both the east and the west coasts, must ensure that adequate facilities are available in potential places of refuge to deal

with diseases like the avian bird flu, the Norwalk virus and Severe Acute Respiratory Syndrome (SARS), in order to protect coastal populations. A request for a place of refuge from a cruise ship or a passenger vessel could involve scenarios where infectious diseases would be a factor. Although Canada's treaty obligations do not compel Canada to grant refuge in such cases, the issue must be considered if tourism and economic development are considered a priority.

The growth in the types and sizes of ships has also added a new dimension to the debate on places of refuge. Large oil tankers and, indeed, any large ship equipped with diesel propulsion systems, carry vast amounts of crude oil and refined petroleum products, either as cargo or as fuel bunkers for propulsion and other ship's services. Several international conventions address ship-generated marine pollution. A places of refuge policy would meet these organization and preparedness requirements to protect the marine environment, as well as providing ships in needs of assistance with a safe haven.

While the obligation to assist ships in distress is *prima facie* unassailable, it is less clear whether a place of refuge has to be provided to such ships. A damaged ship potentially poses environmental risks. Refuge pits the provision of assistance to a ship in distress against the protection and preservation of the environment obligation. Canada's environmental obligations are unequivocal. This dichotomy requires resolution on an international level as well as on national, provincial and regional levels.

An additional consideration is the highly charged security environment following the terrorist attacks on 11 September 2001 in the United States, which has led to the introduction of measures to bring dangerous cargoes and any suspicious cargoes (especially containerized cargoes) under increased scrutiny and control. Such measures need to be harmonized with any regulations adopted to assist ships in distress or in need of assistance.

A Places of Refuge Policy for Canada

The IMO Guidelines represent international consensus on the issue of decision-making by the master, salvor and coastal authorities on places of refuge. Although they are not legally binding, they will be implemented widely and may eventually become a standard for diligent conduct. Canada should consider incorporating the IMO Guidelines by legislation into its places of refuge decision-making structure.

The implementation of the IMO Guidelines should allow for case-by-case decision making. Incident-specific measures would be taken after the notification of an incident by the master and the request for assistance. The master would arrange for salvage services as necessary, in consultation with the Canadian reporting authority. This authority would be required to provide advice to the master on the facilities and equipment available in a place of refuge, if necessary. As the circumstances warrant, a boarding team will inspect and assess the ship and its condition from the perspective of granting or denying access to a place of refuge, and report the findings to all interested parties.

A national policy should vest decision-making authority on refuge requests in the Regional Director of Transport Canada in the region of the ship in need of assistance. The Canadian Coast Guard's Marine Communications and Traffic Services organization would be a logical choice to serve as the MAS body specified in the IMO's resolution on the subject. Additional training and information dissemination would, of course, be necessary to enable both of these parties to fulfil these roles.

In a distress situation the Maritime Rescue Co-ordination Centre (of which the Canadian Coast Guard is a part) is the initial contact for the ship and the lead decision-making authority. At the same time, Transport Canada, given its policy and regulatory functions, would be in a good position to rapidly access required documentation and information about the ship, its owners and operators or agents, other federal government organizations (such as Environment Canada and the Canadian Coast Guard), spill response organizations, tug

operators, salvage associations, ship repair yards and ship repair facilities, and classification societies to make an effective, rational and equitable decision concerning a request for refuge. Having another federal organization undertake the function of evaluating and responding to the request for assistance and a place of refuge provides for a second opinion and assessment at a time of high emotion and stress.

If search and rescue are not required, Transport Canada would be able to step-in immediately and begin the assessment process. Furthermore, Transport Canada would have an advantage garnering any necessary support from other modes of transportation and infrastructure providers to ensure a speedy and integrated response to a request for refuge, as it has oversight of all modes of transportation. Hence, a coordinated, two-pronged Canadian federal response structure involving two federal ministries – the DFO (CCG) for the humanitarian search and rescue component and Transport Canada for the providing of assistance and evaluating the request for a place of refuge component, is recommended. Other Canadian federal departments and agencies, as well as private organizations and individuals with expertise in the providing and co-ordinating of pollution response and environmental, security and legal measures would be activated as necessary, in any place of refuge incident. The command, control and coordination framework necessary for compliance with the IMO Guidelines in Canada could be thus superimposed on the existing maritime control, command and coordination infrastructure, to maximize efficiencies and cost-effectiveness.

On the one hand, advance designation of places of refuge in Canada would have the advantage of removing the uncertainty in the decision-making process and providing accurate and timely information on equipment, facilities, risks and benefits of particular sites. On the other hand, the potentially negative public reactions, the impossibility of predicting the exact nature and degree of threat scenarios and response mechanisms, and the sheer number of places of refuge that would need to be identified along Canada's extensive

coastline, along with the need for environmental assessments of potential sites, renders the advance designation of places of refuge unviable. Instead, gathering comprehensive coastal zone data relevant in the determination of the suitability of sites along the coastline would be a pragmatic, cost-effective and flexible approach to the issue and would enhance the decision-making process. Hence, pre-designation of places of refuge in Canada is *not* recommended.

Issues of financial cost-recovery and compensation, and insurance arrangements should also be addressed in Canada's policy. Here consideration needs to be given to the development of means to compensate port or harbour authorities and other organizations that provide places of refuge. This is suggested to encourage the cooperation of these parties and to smoothen the processing of requests for places of refuge. The objective is to provide a reasonable degree of incentive to the authorities managing Canadian ports, so that, should the need arise, the port authorities would be more inclined and quick to extend their cooperation.

Conclusion

A national places of refuge policy is an essential component of Canada's oceans management strategy. A cohesive and robust structure for conflict resolution will help assure the continued progress and development of all ocean-based industries and minimize threats to Canada's oceans and marine environment. The Canadian and international experiences of ships in need of assistance and the lessons learned dictate that developing a places of refuge policy is not only prudent, but imperative if Canada is to continue to be a major player in the global marketplace.

The preparatory measures and the incident-specific measures set out in the IMO Guidelines lay out a logical set of directions, input data for decision-making and evaluation procedures encompassing all aspects of the unfolding threat scenario, to arrive at a balanced, rational and just decision in the best interests of all the concerned parties. Incorporating the requirements of the IMO Guidelines into existing governance structures and chains of command and control

avoids unwieldy bureaucratic frameworks and is ideally suited to the Canadian context. Bestowing the lead decision-making authority with regard to places of refuge scenarios on the Regional Director of Transport Canada, in the region of the ship in need of assistance, while the CCG maintains its role in search and rescue (serving as Canada's designated MAS body) makes optimum use of the existing resources while promulgating a viable policy for Canada.

The measures suggested here to design a Canadian national policy on places of refuge are comprehensive, pragmatic and flexible and are tailor-made to the existing command and control infrastructure of Canada. These measures are, therefore, worthy of consideration by the Government of Canada.

End Notes

¹ Transport Canada, *Straight Ahead: A Vision for Transportation in Canada* (Ottawa, Transport Canada, 2003) (hereafter Straight Ahead Report).

² *Ibid.*, 39.

³ The Department of Fisheries and Oceans and Transport Canada are studying various submissions.

⁴ Guidelines on Places of Refuge for Ships in Need of Assistance, IMO Assembly Resolution A.949(23), adopted on 5 December 2003, IMO Doc. A 23/RES.949, 5 March 2004.

⁵ Straight Ahead Report, *supra* note 1, 39.

⁶ A. Chircop, "Ships in Distress, Environmental Threats to Coastal States, and Places of Refuge: New Directions for an Ancien Regime?", 33 *Ocean Development and International Law*, No. 2 (1 April), 2002, at 208.

⁷ *Ibid.*, at 208. See also *Canada (Attorney General) v. MacDonell* (1883), 1 Ex. C. R. 99.

⁸ B. T. Hill, "Database of Ship Collisions with Icebergs", National Research Council, <www.nrc.ca/imd/ice/scdb_index.html>, 8 February 2002.

⁹ CBC News, "Troubled tanker turns south watched by U.S. Coast Guard", www.cbc.ca/cgi-bin/templates/view.cgi?news/2000/12/13/oil_tanker001213, 13 December 2000.

¹⁰ *Ibid.*

¹¹ Michael Tutton, "As Crew Battled Ship Blaze, Fire Officials Debated Jurisdiction", <www.dcfp.navy.mil/mc/articles/other/Kitano.htm>, 26 November 2003.

¹² Captain J. Proulx, "Navy, Air Force respond to fire on board container ship", <www.dnd.ca/site/community/mapleleaf/html_files/html_view_f.asp?page=Vol4_13___Navy8-9>, 24 March 2001.

¹³ The Great Lakes – St. Lawrence Seaway/River/Gulf System extends 4,000 kilometres from the Canadian Lakehead at Thunder Bay, Ontario, to the Cabot Strait

between Nova Scotia and Newfoundland and the Strait of Belle Isle between Newfoundland and Labrador.

¹⁴ G. Herbert, "Shipping in Canada",

<www.naval.ca/article/herbert/shippingincanada_byglenherbert.html>, Spring 1997.

¹⁵ *Canada Shipping Act*, R.S. 1985, c. S-9 (hereafter CSA 1985), s. 1.

¹⁶ *Canada Shipping Act*, 2001, R.S. 2001, c. 26 (hereafter CSA 2001), s. 151 and ss. 153–164. This act is not yet in force as pertinent regulations are still under development. When it comes into force, it will supersede CSA 1985.

¹⁷ *Arctic Waters Pollution Prevention Act*, 1985, R.S. 1985, c. A-12.

¹⁸ *Constitution Act*, 1867, (UK), 30 & 31 Vict., c. 3 reprinted in R.S.C. 1985, App. II, No. 5. See the Government of Canada, "The Constitution Act, 1867" (Section VI), <www.solon.org/Constitutions/Canada/English/ca_1867.html>, 10 November 2001.

¹⁹ *Ibid.*, s. 101.

²⁰ E. Gold, A. Chircop and H. Kindred, *Maritime Law* (Toronto, Irwin Law, 2003), at 111 *et seq.*

²¹ *United Nations Convention on the Law of the Sea*, Montego Bay, 10 December 1982 (in force on 16 November 1994), UN/Doc. A/CONF.62/122, 7 October 1982 (hereafter LOS Convention), Parts II–VI and XII. See also Agenda 21, Chapter 17, <<http://habitat.igc.org/agenda21/index.html>>, 5 August 2005.

²² NPA, *supra* note 17, chapter 1, section 1.1A, 1.

²³ *Oceans Act*, R.S., 1996, c. 31 (hereafter Oceans Act), Part II, Oceans Management Strategy.

²⁴ Fisheries and Oceans Canada, "Canada's Oceans Act",

<www.pac.dfo-mpo.gc.ca/oceans/OceansAct/OAPart2Act>, Part II, Oceans Management Strategy, 25 February 2005.

²⁵ Transport Canada, 'Transportation in Canada 2000 - Transportation Infrastructure (The Port System)' <www.tc.gc.ca/pol/EN/Report/anre2000/tc0010de.htm>, 5 March 2003.

²⁶ *Canada Marine Act*, R.S. 1998, c. 10 (hereafter CMA), s. 4(g).

²⁷ CSA 1985, *supra* note 21, s. 661.

²⁸ CSA 2001, *supra* note 22, s. 175(1).

²⁹ CMA, *supra* note 38, s. 8.

³⁰ *Marine Transportation Security Act*, R.S. 1994, c. 40 (hereafter MTS) and Maritime Transportation Security Regulations, SOR/2004-144, s. 1, "Port Administration".