Transport Canada Transports Canada

TP 12988

Marine Safety Review

ISSUE 6 ❁ SPRING 2000

Marine Safety Award

Transport Minister David Collenette presented Michael Eaton of Dartmouth, N.S., with the Transport Canada Marine Safety Award for his outstanding contribution to Canadian maritime safety. Mr. Eaton received the award on May 4, 2000 at the annual meeting of the Canadian Marine Advisory Council (CMAC).

"Mr. Eaton's efforts towards the improvement of marine safety, particularly developments in the area of navigation, have greatly benefited the Canadian marine industry," said Mr. Collenette. "I congratulate Mr. Eaton on his accomplishments, and am very pleased to present this award to him."

Mr. Eaton, who began his career with the Canadian Hydrographic Service (CHS) in 1982, has been instrumental in developing and promoting Electronic Chart Display and Information Systems (ECDIS) and electronic charts. In 1988, Mr. Eaton retired from CHS, and for the next ten years served as a consultant to the Government of Canada, developing ECDIS display specifications.

His work included creating an electronic chart testbed project to develop specifications for the electronic chart database and to investigate the effects of electronic charts on safe navigation. The results of this project formed the foundation for international standards.

The Transport Canada Marine Safety Award was established to promote awareness of marine safety in Canada, and to recognize persons, groups, companies, organizations, agencies and departments that have contributed, in an exceptional way, to this objective. The first award was presented in 1997 to Capt. W. S. G. Morrison of Ottawa.

The Canadian Marine Advisory Council is a consultative body of parties that have an interest in shipping, navigation and marine pollution. The Council is jointly chaired by senior members of Transport Canada and the Canadian Coast Guard, and advises both departments on matters that fall within their respective mandates.

Contributor: Peter Gregg, Office of the Minister of Transport, Ottawa

Inset Image: (left to right) Mr. Eaton and the Honourable David Collenette

Table of Contents

Canada

Marine Safety Review

Marine Safety Review is published quarterly by the Marine Safety Directorate of Transport Canada to keep the maritime community informed about marine legislation, relevant research, projects and events.

Inquiries

Please forward comments, queries, insights to:

Editor
Marine Safety Review
Transport Canada, Marine Safety
Tower C, Place de Ville
330 Sparks Street, 11th Floor
Ottawa, Ontario
Canada K1A 0N8

Telephone: (613) 990-6653
Facsimilie: (613) 990-6191

E-mail:
MarineSafety@tc.gc.ca

Web site:
http://www.tc.gc.ca/MarineSafety

Remarks from Director General

Staying the Course and Looking to the Future

Marine Safety has entered the new millennium on course. During the past few months, we have continued to make slow but steady progress towards fulfilling the goals of our strategic plan. The new Canada Shipping Act, 2000 is ready and we eagerly anticipate its introduction into Parliament. The work of regulatory reform is being accelerated to deliver the modern framework we have promised.

As I travel around our regions, I am continually mindful of the need to find better ways to communicate our messages to our staff, our stakeholders and the public. This is the challenge for us over the next few months: to find better ways to solicit input from internal and external stakeholders into our initiatives, to announce the initiatives underway, and to ensure that public users of marine transportation are aware of these initiatives.

There will be an increased emphasis on environmental protection and sustainable development in the future. Marine Safety is looking at various ways to address these growing priorities and we will be providing more information on these subjects in future editions.

Bud Streeter

This is the sixth issue of *Marine Safety Review* and, as previously, it will explore what is new within Marine Safety, and highlight some of the current issues we are dealing with. We welcome your inquiries and comments and encourage you to send them to us (**marinesafety@tc.gc.ca**).

Sincerely,

Bud Streeter
Director General
Marine Safety

*On a recent visit to Nova Scotia, Bud Streeter toured the facilities of Superport Marine Services Limited in Port Hawkesbury. Seen here before the bow of a new 15 meter (50') steel hull pleasure craft are (left to right): **1. Hans Kastner**, Senior Marine Inspector (Machinery), Port Hawkesbury Office; **2. Bud Streeter**, Director General, Marine Safety; **3. Paul Chapman**, Manager Sydney, Nova Scotia, TCC (Machinery); **4. Leslie McIntyre**, President, Superport Marine Services Limited.*

Challenges of Maritime Work Appeal to Marine Inspector

This is the first in an occasional series profiling employees in Marine Safety pursuing non-traditional careers.

A long-time love of maritime work led Leah Quiring to her current position as one of the few female marine inspectors with Transport Canada.

Before entering college, Quiring was a member of the Royal Canadian Sea Cadets. She had also heard positive things about working on board ship from a relative in the profession. When it came time to pick a college, she chose Georgian College and its Marine Engineering Technology program.

Quiring was the only woman in the program when she began, although two others joined later. After graduation, she wrote the exam to get her Fourth Class Marine Engineer papers and set off to pursue her career with the Great Lakes fleet.

The career choice suited her and she worked her way up, acquiring experience and improving her certification status. It was after being certified as a First Class Marine Engineer that Quiring became interested in becoming a Marine Inspector.

The job attracted her because it offers plenty of opportunity for professional development and because Transport Canada is a superior employer. "This career path offers me an opportunity to significantly improve my quality of life and my personal skills," she explains.

Leah Quiring observing tests on a main electrical switch board (top) and inspecting a fuel injection system (bottom).

A Marine Inspector covers a lot of ground, says Quiring. She is currently rated to be a Steamship Inspector, Tackle Inspector, Examiner of Seafarers, Safety Officer, Container Inspector, Dangerous Goods Inspector, Tonnage Measurer and Deputy Shipping Master. She will soon be appointed a Pollution Prevention Officer.

Quiring says she plans to spend the next few years mastering the position of Marine Inspector and hopes to have a long career with Transport Canada.

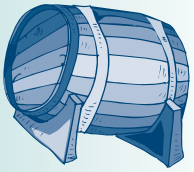
Special Thanks to Leah Quiring for her contributions to this article.

The History of Tonnage Measurement

In the new Canadian regulations tonnage is just a number, with no ton unit associated with it. Below, Jerzy Trzesicki explains some of the history behind the varying ways tonnage is calculated.

As early as the 13th century, Britain imported wine (then the greatest single shipped commodity) from France by ship. In the 15th century, British law prescribed that imported wine be carried in casks of a specified size, and the taxation system was based on this measurement.

The flaw in this taxation system was that it became nearly impossible to measure the tonnage of a ship carrying cargo other than wine casks.



The term *ton* is derived from the French term for wine casks – *tonneaux* or *tun*. Standardized by British law in 1423, a ton held approximately 252 gallons of wine and weighed approximately 2,240 lb., comparable to today's long ton.

To correct this problem, dues were assessed by the end of the 17th century based on the approximate dead weight or cargo carrying capacity of the ship. Dead weight included the amount of cargo, fresh water and crew the ship could carry when fully loaded.

Deadweight was estimated using the Builders Old Measurement Rule formula of 1720. This method assumes that dead weight constituted 60 percent of the ship's total weight (displacement), and that every vessel had a typical underwater shape – the draught was equal to 50 percent of the vessel's breadth.

Ship designs became narrower, longer and much deeper so owners could benefit from the formula. These new designs caused vessels to become clumsy, unstable and ultimately, unsafe. Furthermore, the ship's assigned tonnage was smaller and no longer corresponded to the actual dead weight.

Recognizing a need to eliminate the ill effects of the Builders Rule, the British Parliament turned to the Moorsom System for tonnage measurement in 1854. The Moorsom System determined the volume of a

...continued on next page

International (1969) and new Canadian (2000) tonnage regulations

Vessels 24 m or more in length

Gross tonnage is a numerical value that is a logarithmic function of all enclosed spaces within a vessel. For unified and true representation, spaces are measured to the moulded lines. In other words, tonnage is a number and has no unit value. Therefore, a ship's tonnage should be referred to without using any unit (e.g. a vessel of 15 in gross tonnage, or of 15, gross tonnage).

Small Vessels less than 24 m in length

Tonnage for this size vessel is determined using the Tonnage Block Coefficient Method. Tonnage is based on volume expressed in cubic metres. A tonnage unit is not introduced, though it could be, as there is no logarithmic component in the formula. (Using the new "ton" would create havoc, as it would now be equal to one cubic metre, and not to the previously adopted unit of 100 cubic feet). It is suggest that tonnage be thought of as a number.

Superseded Canadian tonnage regulations and various existing national rules (e.g. those in the U.S.A. or on the Panama Canal)

Gross tonnage is a measure of the internal volume of spaces within a vessel, calculated to the structural rather than moulded lines. It is expressed in tons, and 1 ton equals 100 cubic feet. In this system, a ship's tonnage is referred to using its dedicated unit, the ton. Bear in mind, though, that a ton represents volume, and not weight (e.g. a vessel of 15 tons, gross tonnage).

Comprehensive Workforce Renewal Planning Project

To increase representation and improve the distribution of designated groups, an innovative apprenticeship project was proposed and accepted by the Public Service Commission and the Treasury Board Secretariat under the Employment Equity Partnership Fund. As a result, the Quebec Region's Comprehensive Workforce Renewal Planning (CWRP) project for ship-inspector positions was implemented in September 1999.

This apprenticeship project seeks to recruit women with the best potential of obtaining the qualifications required for marine safety inspector positions at the technical inspector (TI) - 07 level. Another objective of the project is to help candidates gain the experience required by marine safety inspectors.

Unique within Transport Canada, this project has been held up as a model program across the country by the Public Service Commission.

Since implementation of the CWRP project, four women have been hired for a 12 to 18 month probationary period. The progress of our candidates is summarized as follows.

Sea time

Two candidates required six months of sea time. As of March 31, 2000, they have each accumulated two months sea time; one with a private partner (the Desgagnés Group), the other with the Canadian Coast Guard fleet. The candidates are expected to complete their sea time by October 2000.

Examinations

Three of the four candidates need to complete examinations required to obtain higher certificates, two in mechanics and one in nautical. The examinations began in December 1999 and the candidates are expected to complete them by December 2000.

Field training

Of the three candidates without higher certificates, two have received two months of field training followed by a two-week orientation session for new inspectors. The third candidate, who joined the group later – on November 15, 1999 – received two weeks of classroom training. The candidate holding a master mariner certificate has been undergoing continuous training since September 1999 in addition to receiving two weeks of classroom training. She should complete her training no later than September 15, 2000. The remaining candidates will complete their field training in the spring of 2001.

We are satisfied with the progress made to date. Considering that this program did not exist last year our results are significant. Many thanks to the members of the Marine Safety Employment Equity Committee, responsible managers, coach inspectors, and all staff involved.

Contributor: Denis Galarneau, Regional Director, Marine Safety, Quebec

...continued from previous page

vessel in cubic feet. This was desirable, as the volume of all spaces available for the transportation of cargo or passengers constituted a more accurate measure of a vessel's potential earning capacity, and a more acceptable basis for taxation.

To maintain fairness when converting to the new system, the total volume of the British merchant fleet was divided by the total assigned tonnage of the fleet under the old system. The resulting quotient happened to be about 98. Since then, one "ton," be it gross or net registered tonnage, has been taken to be 100 cubic feet.

In the new Canadian regulations, which came into force February 25, 2000, tonnage is just a number, with no ton unit associated with it (as the value per unit of volume is greater on a vessel of large volume than on a vessel of small volume).

Contributor: Jerzy Trzesicki, Marine Safety Inspector, Hulls, Vancouver

Reference: *Ship Design and Construction,* by Robert Taggart, SNAME, 1980

The Tonnage Measurement of Ships – Towards a Universal System, by Michael Corkhill, Fairplay Publications, 1977

Marine Safety Examiners Meeting Features Full Agenda

Marine Safety Examiners, engineering and nautical, met in Ottawa from April 4 to 6.

The session featured an update on the printing contract for new Standards of Training, Certification, and Watchkeeping (STCW) certificates that comply with STCW Standards. Furthermore, efforts to prepare Canada's submission for inclusion on the International Maritime Organization's "white list" was highlighted. The IMO "white list" details those countries whose certification system meets STCW 95 standards. An international panel of experts is currently reviewing the submission, which is of crucial importance to Canadian seafarers.

Participants reviewed a discussion paper on proposed changes to the *Crewing Regulations* and the *Marine Certification Regulations*. Topics covered included:

- ensuring that personnel on all commercial vessels, regardless of the size, receive basic safety training;
- the requirement for a certified master on all commercial vessels, regardless of size; and
- new provisions for high-speed craft and air-cushion vehicle certification.

Presentations were made on the national examiners training program, a collaborative project between Marine Safety's Personnel Standards & Pilotage division and Program Services division, which is intended to improve the seafarer examination system.

Finally, it was announced that instructions to examiners have been revised, brought up to date and issued in a quality assurance format. Participants expressed satisfaction with the meeting. A number of examiners said they appreciated the openness of the discussions and the opportunity to contribute to policy development.

Session highlights

- The nautical examiners received the revised syllabus for SEN (simulated electronic navigation) and revised syllabus and details of the new certification process for ROC-MC (Radio Operator Certificate – Maritime Commercial). In both cases, working groups that included representatives from the shipping industry drafted the revised syllabi.
- The proposed revisions to the *Marine Certification Regulations* and *Crewing Regulations* were thoroughly discussed. Highlights included a discussion of the sea service calculations for nautical certificates, the application of the hours-of-rest provisions of STCW, and the issue of certificates under the former *Masters and Mates Examination Regulations*. The administrative burden of issuing Master Limited certificates to commercial vessels down to zero tonnage was also discussed; examiners were asked to submit suggestions to ease the process of implementing this policy.
- Engineering education and training developments to meet new STCW requirements, including mandatory engine room training and workshop skills training, were discussed. A definition of qualifying sea service for continuous proficiency was considered. Staff from Rimouski presented a review of engine room simulator training and a wide-ranging discussion on simulator training followed. Consensus was reached on removing the Chief Engineer and Second Engineer certificates, while retaining the qualification as an endorsement to existing certificates.
- Among the many other issues raised was a request that planning begin very soon for the new certificates of competency required for implementation of STCW 95 in February 2002.

Contributor: John Clarkson, Acting Director, Personnel Standards & Pilotage, Ottawa

What's New

White Water Rafting

Marine Safety is reviewing the commercial River Rafting Standard (TP 8643) to update and improve the consistency and application of the standard to all Canadian waters. Consultations with river-rafting outfitters were held recently in Calgary, Alberta, and Dorval, Quebec. Marine Safety has also established a web site (**www.tc.gc.ca/marinesafety**) so the more than 100 outfitting companies across Canada can participate in revising the standard.

Photographs courtesy of Wild Blue Yonder Adventure Tours.

Ship Registration Guide

So, you're buying a ship or a boat. Maybe you've heard that you need to *register* your ship, while others have told you that you have to get a *licence* for your boat. To lend a helping hand with the registration and licensing process, Marine Safety has published *How to Register a Ship or Boat in Canada* (TP 13414). For more information, visit the Marine Safety web site (**www.tc.gc.ca/marinesafety**) or contact Jeannine Godin (**GODINJ@tc.gc.ca**).

Multi-modal Transportation Tribunal

Over the past several years, Transport Canada has been engaged in extensive legislative activity to reduce its role in policy development and regulatory oversight.

During the review of compliance mechanisms intended to foster safer transportation, the concept of a multi-modal transportation tribunal arose.

The project progressed from one of reviewing the potential scope of application of a tribunal to recently receiving Cabinet approval to continue the Civil Aviation Tribunal as the Transportation Appeal Tribunal of Canada.

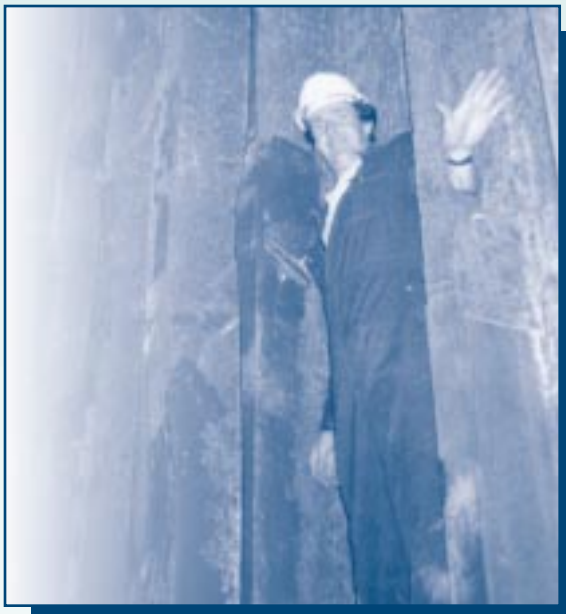
Transport Canada will continue integrating the tribunal into legislation and regulation, enhancing its scope to encompass marine, rail and surface modes, in order to provide a fair and effective means for reviewing administrative decisions. For more information, please visit our web site (**www.tc.gc.ca/tcss/tatc/main_e.htm**).

New Port State Control System

Marine Safety is in the process of re-designing the Port State Control (PSC) system – it will feature a new look, added capabilities, and a new name. The new system will be called the Canadian Port State Control (CPSC) system. The expected completion date is the end of June 2000. Over the summer months, the CPSC system will operate parallel with the existing system to ensure a smooth transition to the new environment.

The CPSC system is being designed as a secure client server application with accessibility nation wide via the internet. The end result will be a more efficient, user friendly system with increased data fields and the capacity to retrieve historical information for each vessel.

Marine Safety foresees the CPSC system as a big step forward in providing our PSC inspectors with enhanced business tools to facilitate their work, enabling Marine Safety to provide an even better service to our clients.



A Port State Control Inspector waves through a corroded bulkhead on a deficient vessel.

Legislative Update

As *Marine Safety Review* has reported in previous issues, reform of the *Canada Shipping Act* is following a two-track approach. Track 1 resulted in Bill C-15, which received Royal Assent on June 11, 1998 and came into force in its entirety on February 25, 2000. The Department is proud of the work done to date and believes that Track 2, Bill C-35, which will result in a new, modernized statute, is equally important.

As part of our commitment to consult with stakeholders, Transport Canada and the Department of Fisheries and Oceans disseminated a copy of the draft legislation (Canada Shipping Act, 2000) to key stakeholders. Thank you to all those who took the time to examine and evaluate the draft bill and to submit comments and suggestions. This feedback proved helpful in finalizing the Bill.

Now that Bill C-35 has been introduced in the House of Commons on June 8, 2000, Transport Canada and the Department of Fisheries and Oceans will send to those who made submissions a summary of the suggestions and comments they received and the departments' response to them.

Given that the Canada Shipping Act, 2000 is primarily an enabling authority and much of the detail will be in the accompanying regulations, Marine Safety is developing a regulatory reform plan that will indicate timelines for regulatory priorities.

Contributor: Elisabeth Bertrand, Consultations & Communications Coordinator, Ottawa

Electronic Forms Now Available

Many of the forms Marine Safety employees use are now available on-line.

Marine Safety is currently converting ship inspection certificates and other marine forms to electronic format. As part of the conversion, the forms are standardized, updated, and centralized on the web. This initiative will harmonize our efforts nationally, enabling Marine Safety to provide an improved and more efficient service to meet the changing needs of our clients.

The forms converted to date are available through the Transport Canada Forms Catalogue. Currently, the Forms Catalogue is only available to Transport Canada employees through the Department's internal network, but plans are underway to create an Internet version that will provide access to marine forms required by our partners and the public. We will keep you posted on the availability of this new service.

Recently, several ship inspection certificates were updated to reflect the global and uniform implementation of the harmonized system of survey and certification (HSSC). The HSSC, which entered into force on February 3, 2000, was adopted by the International Maritime Organization's (IMO's) 21st Assembly, under Resolution A. 883(21).

Listed are some of the affected certificates.

- Passenger Ship Safety Certificate (SIC 01), including Record of Equipment (Form P);
- Cargo Ship Safety Construction Certificate (SIC 3); and
- Cargo Ship Safety Equipment Certificate (SIC 4), including Record of Equipment (Form E).

Further information on Assembly Resolution A.883(21) is available in the *IMO News,* issue Number 1:2000.

Tonnage forms were also updated in February to comply with the new *Ship Registration and Tonnage Regulations.*

For more information about the conversion of ship inspection certificates and other marine forms to electronic format, please contact Anna Dinardo by e-mail at DINARDA@tc.gc.ca or by telephone at 990-6653.

We acknowledge the dedication of the Certificates Working Group members who provide comments and advice for this project:

Atlantic: Alan Milne and Sharon Fahie

Quebec: Charles-Henri Dumont, Francine Pelchat, and Normande Tremblay

Ontario: James Salt and Josephine Disiewicz

Pacific: Charles Hansen

Headquarters: Andrew Hart, David Ford, Berthier Pineau, and John Clarkson

Regional Activities

Pacific

Sewage pollution management

Consultations with industry on vessel-based sewage pollution have been underway in British Columbia for several years. The consultations have focused mainly on pleasure craft, and so, although linked, the non-pleasure craft community had little input into the additional sites to be designated as "no dumping" zones. To address the commercial sector's interests, Transport Canada established the Regional (Pacific) Canadian Marine Advisory Council Working Group in early 1999. The group reached agreement on 14 additional sites, and amendments to the *Pleasure Craft Sewage Pollution Prevention Regulations* were published in Part I of the *Canada Gazette* on March 25, 2000.

Want to know more?

Regional information
Charles Hansen (**hansech@tc.gc.ca**)

National information
Doug Gillen (**gillend@tc.gc.ca**)

International information
Tom Morris (**morrist@tc.gc.ca**)

Ballast water management

The introduction of non-indigenous species threatens the biological diversity of Canadian waters. Local authorities on the West Coast of North America are countering this threat by implementing procedures to minimize the introduction of foreign life forms into the local ecosystem. Current Ballast Water Management data show more than 95 percent of ships respect the West Coast's biological diversity by managing their ballast water to the satisfaction of local authorities.

Want to know more?

Regional information
Charles Hansen (**hansech@tc.gc.ca**)

National and international information
Tom Morris (**morrist@tc.gc.ca**)

Prairie and Northern

Arctic towing guidelines

Draft guidelines were presented at the Northern Canadian Marine Advisory Council (CMAC) meeting held in Iqaluit, Nunavut (April, 2000). A working group involving industry and Marine Safety will be struck to study the draft guidelines in detail and to make recommendations for improvement.

Guidelines for Arctic cruise ships

Draft guidelines have existed for several years and the final version is scheduled to be published this year. These guidelines are intended to assist organizers of cruises which venture into Canadian Arctic waters by providing information about applicable regulations and government programs that may impact on Arctic cruises.

Want to know more?

Regional information
Peter Timonin (**timonip@tc.gc.ca**)

Ontario

Ballast water exchange

The need for ballast on ships to be changed prior to entry into the Great Lakes is currently required on a voluntary basis in Canada, while the United States has made it mandatory.

Local shipping companies have adapted to the disparity, and the majority of foreign owners have complied reasonably well. Recent events, however, may cause unrest in the Great Lakes, instigated by regulations proposed by the State of Michigan.

These proposed regulations prohibit not only the discharge of offshore ballast water, but the actual carriage through Michigan State waters. The proposed State law would require ballast which did not originate in Michigan to be sterilized prior to the vessel being permitted to enter Michigan waters. This would, in effect, close shipping through the Great Lakes system west of Detroit.

Understandably, the problem is both a safety issue and an environmental one covering several pieces of legislation including the *Canada Shipping Act* and International agreements.

Marine Safety, is working closely with the Canadian and U.S. marine industry, and with various other government departments, to resolve this dilemma.

Quebec

Comprehensive workforce renewal planning project

To increase representation and improve the distribution of designated groups, the Marine Safety Employment Equity Committee proposed an innovative apprenticeship project that was accepted under the Treasury Board Secretariat's Employment Equity Partnership Fund. As a result, the Quebec Region's *Comprehensive Workforce Renewal Planning* (CWRP) project for ship-inspector positions was implemented in September 1999.

Want to know more?

Please see our feature article on page 5.

Inspectors discuss harmonization

Marine Safety inspectors from across Canada are meeting in Montreal, June 20 to 22, 2000. The Quebec Region is hosting this meeting – the third in a series of sessions intended to help the regions harmonize inspection procedures.

Bringing inspectors together allows Marine Safety to share best practices and ensure a common approach is used across the country. The topics to be discussed in Montreal include statutory inspections, dangerous goods, Port Wardens, containers, life-saving equipment, small commercial vessels, safe manning and the electrical code.

Atlantic

Offshore industry

Oil and gas development represents one of the driving forces within the Atlantic Region. Highlighting current events are:

- The *Cohasset Panuke* oil production facility shut down after nine years of operation following the depletion of two wells.
- The *Hibernia* development on the Grand Banks has been in operation for over two years.
- On May 10, 2000, the *Floating, Production, Storage and Offloading* (FPSO) *Terra Nova* vessel arrived at Bull Arm, Newfoundland to fit the topsides and is scheduled for completion by December 2000. This ice-strengthened, double-hulled vessel has a displacement of 196,000 tonnes and has presented many interesting challenges to Marine Safety. A second FPSO is expected for the White Rose field to be operated by Husky Petroleum.

  Want to know more?

  Visit **www.terranovaproject.com**
- Five new offshore support vessels have been built and delivered in the past year for use along the east coast. Currently, a shuttle tanker is under construction in Korea. The vessel, with two existing "sister" tankers, will transport oil from the *Terra Nova* and *Hibernia* projects to Whiffin Head for transshipment to world markets.
- The Sable gas project came on stream the last day of 1999. This project, which uses fixed structures known as "jackets" and underwater pipelines, required the use of some of the largest floating equipment in the world to complete.
- This year will see an extensive seismic survey program to seek, delineate and quantify potential oil and gas fields.

Ferries

A second high-speed ferry, the *Max Mols,* will begin operation this year in the Atlantic Region. The ferry will be operated by Marine Atlantic and will provide the Cabot Strait service between Sydney (Nova Scotia) and Port aux Basques (Newfoundland). The *INCAT 046* has returned for a third season, operating between Yarmouth (Nova Scotia) and Bar Harbour (Maine). Both vessels are 91 m passenger/vehicle ferries which can operate at 42 knots and carry approximately 800 passengers and 200 cars. The ex-Finnish ferry, the *Apollo*, was brought into service in May on the Bell Isle Strait.

Ballast exchange program

The Atlantic Region is currently engaged in studies to prepare for the finalization of Annex 5 of the Water Ballast Guidelines.

Pollution

In response to increased concern about ship shore pollution, Atlantic Region has embarked on a program to publicize our efforts and increase deterrence. Our first quarterly statistics were released in April. A total of 14 vessels were prosecuted and fined a total of $157,500.00.

Naval Architect Finds Field Work Satisfying

Kin Tue-Fee is a veteran naval architect, originally from Mauritius. Kin currently serves as a Senior Marine Inspector with Marine Safety's Design & Construction division and spent March 6 to 31 in the field with the staff from the Quebec City office. Below, he relates his experience.

Kin Tue-Fee with staff from the Quebec City Office. From left to right: ***1. Christian Gilbert****, Operational Assistant;* ***2. Patrick Bérubé****, Senior Marine Inspector;* ***3. Charles-Henri Dumont****, Assistant;* ***4. Nicole Beaudoin****, Administrative Assistant;* ***5. Charles Laliberte****, Senior Marine Inspector;* ***6. Gilles Marcotte****, Senior Marine Inspector;* ***7. Rémi Marceau****, Registrar;* ***8. Kin Tue-Fee****, Senior Marine Inspector;* ***9. Bernard Lachance****, Senior Marine Inspector.*

Field work and ships have always held a certain appeal for me. Being on board ships, getting your hands dirty, carries with it the deep-rooted satisfaction of accomplishing something tangible.

At a recent risk management course, during discussions with Quebec Region's Manager of the Inspections Centre, André Desrochers, and Regional Director Denis Galarneau, I mentioned my desire to spend more time in the field. Enthusiastic about the prospect of gaining the assistance of another naval architect, they were more than willing to accommodate. Having consulted my superiors and obtained their approval, I set off in search of adventure in *La belle province* for four weeks.

I was well received upon arrival. The office staff in Quebec City, Normande Tremblay, Nicole Beaudoin and Christian Gilbert, and all the inspectors made me feel very welcome. But pleasantries were cut short, for a long day of hard work was in store the next day – a sign of things to come.

The next morning brought my initiation in the field. Decked out in overalls, hard hat, steel-toed shoes and all the other necessities, I headed off for the annual inspection of the MV *Thalassa Desgagnés*. The remainder of my time in Quebec featured plenty of activity: an oil pollution investigation, Port State Control inspections, external hull inspections, annual load line inspections, equipment inspections, and the assessment of fire fighting and evacuation exercises for several ships. I also collaborated with my colleagues in the Quebec Regional Office on a number of technical issues.

At the end of four weeks, I returned to Headquarters with a new perspective and new respect for those who work in the field. The experience was never dull, and allowed me to meet a number of interesting people from Quebec and around the world.

I would like to thank all my colleagues in Quebec City for this exhilarating experience, and for their warm and sincere friendship.

Contributor: Kin Tue-Fee, Senior Marine Safety Inspector, Design and Construction Division, Ottawa