Marine *Safety* Review

ISSUE 4 – SEPTEMBER 1999

Legislative Updates

The reform of the *Canada Shipping Act* (CSA) was undertaken in two separate, yet simultaneous, tracks. The first track produced C-15, which amended Part I of the existing Act, covering ship ownership and registration and introduced a new General Part to the Act. Bill C-15 received Royal Assent on June 11, 1998 and provisions of this bill have been coming into force on various dates.

Track two of CSA Reform completes the modernization of the remainder of the Act. The changes proposed will result in an Act that is more concise, modern and logically organized. Confusion will be lessened by updating some of the archaic language and also, by eliminating prescriptive, technical details. The result will be a streamlined, plain language Act that is modern and easier to understand.

The draft bill, entitled *Canada Shipping Act 2000,* was released to stakeholders this past summer for review and feedback. No one will deny the importance of this legislative change and over the summer months we have heard from many interested parties. We will proceed to finalize the bill in the coming months. We anticipate introduction of the bill to Parliament by November of 1999.

A great deal of effort has been made to modernize the national transportation system to meet the demands of a global marketplace and prepare this sector for the coming century. Key components of this overhaul centre on improving the economic performance of the marine industry by delivering a statute that enhances the marine industry's ability to operate and not impinge on it, as is currently the case. There is a desire to have industry operate safely, but to do so in a competitive international market it must have the benefit of a modern regulatory framework.

Bill C-9 (formerly Bill C-44), the Canada Marine Act, received Royal Assent on June 11, 1998.

As well, Bill S-4 (formerly Bill C-58), an Act to amend the Canada Shipping Act (maritime liability), also received Royal Assent on May 12, 1998.

The *Marine Liabilities Act* (MLA) is a proposed statute that consolidates liability provisions (excluding pollution) in one statute, by removing a number of sections from the existing CSA. The drafting of the new MLA is complete, and we anticipate the bill to be introduced into the House of Commons this fall.

Another legislative initiative underway in Transport Canada involves the expansion of the Civil Aviation Tribunal (CAT) into a multi-modal review body. Drafting of the legislation to create this tribunal has not yet been started, but could result in a bill ready for introduction later in the fall of 1999.

Contributor – Elisabeth Bertrand, Project Officer, CSA Reform Project, Ottawa

Table of Contents

Canada

Marine Safety Review
is back to stay

We've been busy of late in Marine Safety. So busy, in fact, that we haven't had time to put together our newsletter.

But after a long absence, *Marine Safety Review* is back with another issue, and we're back to stay. This issue is loaded with valuable information regarding:

- the Marine Safety Examiners' April meeting in Ottawa;

- the new Global Maritime Distress and Safety System (GMDSS), implemented in February;
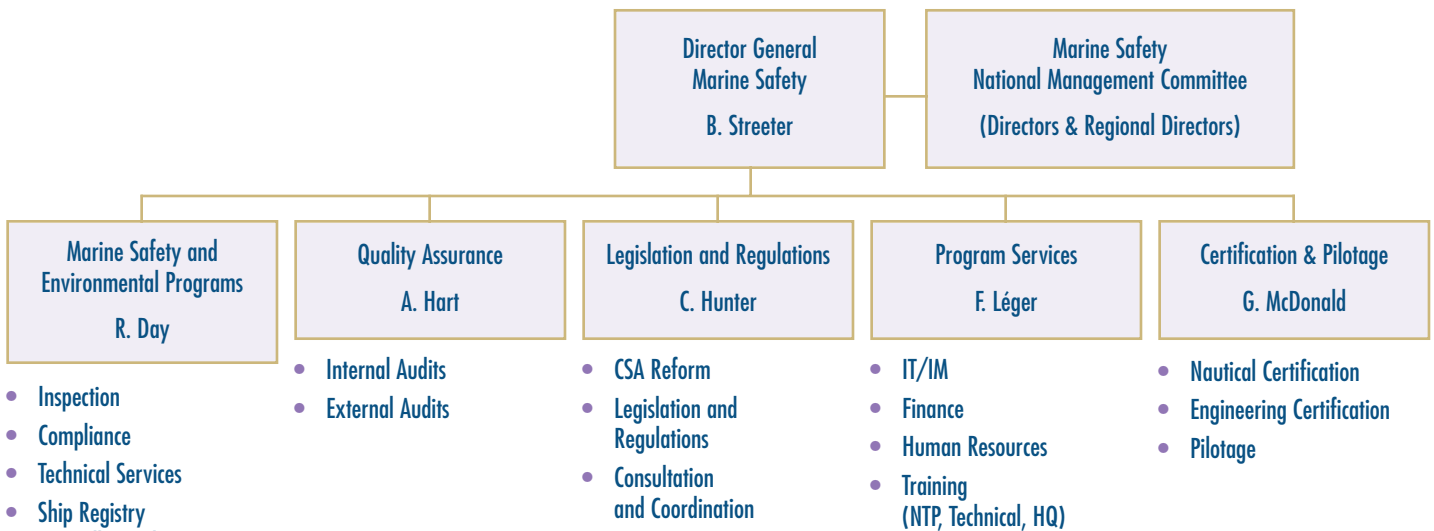
Bud Streeter

- the Interim Program for passenger vessel compliance;

- the International Safety Management Code; and

- Year 2000 preparations.

Our reorganization is now complete (see box), clearing the way ahead for Marine Safety to concentrate on accomplishing our strategic objectives – not to mention the effective delivery of our other important services. Be on the look-out for our soon-to-be-published Strategic Plan Update.

We continue to welcome your feedback on all our endeavours. To encourage your input, we're introducing a "Letter to the DG" section in the next issue of *Marine Safety Review.* Your letters can be e-mailed to Linda Brazeau, our Marine Information Services Officer, at **BRAZELM@tc.gc.ca**. We look forward to hearing from you.

Transport Canada
Maritime Safety Directorate

```
┌─────────────────────────┐      ┌─────────────────────────────────┐
│   Director General      │      │        Marine Safety            │
│   Marine Safety         │──────│  National Management Committee  │
│                         │      │                                 │
│   B. Streeter           │      │  (Directors & Regional Directors)│
└─────────────────────────┘      └─────────────────────────────────┘
```

Marine Safety and Environmental Programs R. Day	Quality Assurance A. Hart	Legislation and Regulations C. Hunter	Program Services F. Léger	Certification & Pilotage G. McDonald
• Inspection	• Internal Audits	• CSA Reform	• IT/IM	• Nautical Certification
• Compliance	• External Audits	• Legislation and Regulations	• Finance	• Engineering Certification
• Technical Services		• Consultation and Coordination	• Human Resources	• Pilotage
• Ship Registry & Small Vessel Licensing			• Training (NTP, Technical, HQ)	

Meeting the Year 2000 challenge

No newsletter would be complete without mentioning the topic on everyone's mind – the Year 2000 problem. The "millennium bug" is everywhere. It is on posters and billboards, television and radio, in magazines and newspapers, and even on notices included with our utility bills.

THE CHALLENGE

The Year 2000 or Y2K bug came about because computer programmers a few decades ago used two digits instead of four to represent the year in computer databases, software applications and hardware embedded chips. This problem could affect a wide range of time-sensitive databases and mission critical systems – those systems crucial to the health, safety, security and economic well-being of Canadians. From a marine perspective, these systems include, among others, navigation, communications, engine monitoring, and fire detection and control.

Canada is a world leader in terms of preparedness. To date, there are no new regulatory requirements planned for Year 2000 readiness. We do, however, have sufficient regulatory authority to take action in the event that a company is unable to meet an existing regulatory requirement because of a Year 2000 problem.

Year 2000 compliance is one of Marine Safety's highest priorities. We will monitor the state of readiness of both Canadian and foreign registered ships in Canadian waters through our domestic and Port State Control Inspection regimes. Inspections will focus on the backup of critical systems and the capacity of crews to operate such systems manually in case of sudden operation failure.

MAKING PROGRESS

In keeping with government-wide Year 2000 initiatives, we've made significant progress to minimize any possible disruption of services essential to Canadians. We have completed the conversion, testing and implementation phases of action plans to ensure all our mission critical operating systems are compliant.

In addition, virtually all Marine Safety databases are now certified as Year 2000 compliant, including the Ship Inspection Reporting System (SIRS), the Asia Pacific Port State Control Information System (APCIS), the Automated Certification and Examination System (ACES) and the Ship Registration Information System (SRIS). We have also identified all the external organizations with which Marine Safety interacts and will conclude agreements for Year 2000 readiness with these interface partners.

Marine Safety carried out a survey that indicates Canadian ship owners and ship operators are well aware of the Year 2000 problem and are taking action to address the issue.

WHO WAS THERE?

The Year 2000 conference included two information sessions moderated by Ron Jackson, each followed by a question and answer session. The first session focused on the impact of Year 2000 on marine safety and liability. Panel members for this discussion included Bud Streeter, Director General, Marine Safety; Jacques Clavelle, Director General, Technical and Operation Services, Canadian Coast Guard, Fisheries and Oceans Canada; Arthur Payne, President, Canadian Board of Marine Underwriters; and Marian Grzybowski, Senior Surveyor, Lloyd's Register of Shipping.

The second session concentrated on the operations aspect of marine transportation. Panel members included Jim Nicoll, Manager, Information Technology, Halifax Port Authority; Captain Ivan Lantz, Manager, Marine Operation, Shipping Federation of Canada; Captain John Pace, Vice-President, Fleet Management, Canada Steamship Lines; and Romuald Mineyko, Technical Manager, Fednav Limited.

Panel members: Marian Grzybowski, Arthur Payne, Jacques Clavelle and Bud Streeter.

Panel members:
Romuald Mineyko, John Pace, Ivan Lantz,
Ron Jackson (chair) and Jim Nicoll.

Year 2000 conference looks at marine sector readiness

Participants in a recent conference hosted by Transport Canada gained new insight into the level of Year 2000 readiness of the marine transportation industry and a better understanding of potential problems posed by the Year 2000 transition.

The May conference – attended by members of industry and government (see sidebar "Who was there?") – was a spin-off of a September round table discussion convened by Minister of Transport David Collenette to determine the Year 2000 readiness of the transportation sector as a whole.

Coordinated by Marine Safety and Environmental Programs, and chaired by Ron Jackson, Assistant Deputy Minister, Safety and Security, the goal of the conference was to take stock and assess the Year 2000 preparedness of the marine sector. In particular, the conference focused on compliance testing, contingency planning and business resumption plans, as well as identifying outstanding Year 2000 issues.

Speakers included Deputy Minister Margaret Bloodworth, who gave an update on Transport Canada's position on the Year 2000 issue, and Treasury Board's Guy Mackenzie, Assistant Secretary, Year 2000 Project Office, who outlined the steps taken by the federal government to prepare for the Year 2000.

Partnerships and communication, both internal and external, were strong themes throughout the conference. And Transport Canada is playing an important role as a conduit between marine industry and its stakeholders.

As Ron Jackson noted in his opening remarks, "public confidence in the safety and security of the maritime transportation system is a top priority for Transport Canada. This confidence can only be maintained through continued strong partnerships and communications links with those who actually provide the services and equipment."

Participants also expressed concerns about the Year 2000 readiness of ports in Southeast Asia, Africa and India. The Department of Foreign Affairs and International Trade will be providing an idea of the state of readiness of foreign ports and Transport Canada is holding international discussions and meetings to address these concerns.

All participants agreed that although the costs associated with Year 2000 preparedness are very high, the cost of being unprepared, both financially and in human resource terms, is enormous. Complacency must be avoided at all costs. Cooperation is key – sharing information and learning from each other.

The International Safety Management Code (ISM) requires a contingency plan for the manual and emergency operation of safety critical systems. As a result, it is essential that ship owners and ship operators test their systems for Year 2000 compliance.

THE NEXT STEP

Although work is progressing as planned, we can't afford to relax yet. Marine Safety will continue to monitor industry and international readiness, and plan accordingly to minimize business disruption and ensure that safety is not compromised. Based on data gathered over the summer, decisions regarding any proposed restrictions on navigation or other measures will be made available in the fall. (See sidebar, "Year 2000 conference...")

Currently, our attention is focused on contingency and emergency planning. The Department of National Defence is the lead department for facilitating and coordinating the development of national contingency plans via the National Contingency Planning Group. This group has developed business contingency plans for mission critical functions, and Marine Safety will monitor and amend its business contingency plans for mission critical functions as necessary.

For the latest information on Year 2000, check out these Web sites:

Government of Canada
www.info2000.gc.ca
www.tc.gc.ca/tc2000
www.ccg-gcc.gc.ca/Year2000/main

United States Coast Guard Y2K
www.uscg.mil/hq/g-m/y2k

Year 2000 Information Centre
www.year2000.com

Lloyd's Register of Shipping & the UK P&I clubs
www.ship2000.com

Occupational Safety and Health (OSH) Explanations

MARINE OSH RESPONSIBILITY

The *Canada Labour Code,* Part II serves as a comprehensive occupational safety and health (OSH) statute for employers under federal jurisdiction. The workplace safety and health of marine industry employees is protected by the Code, which is the responsibility of the federal Minister of Labour. Within the marine industry, it is administered and enforced by authorities of Marine Safety who are appointed as safety officers and regional safety officers, by the Minister of Labour.

Human Resources Development Canada (HRDC) – Labour and Transport Canada have a joint responsibility for ensuring the proper coordination of the OSH and marine operational safety regimes so that regulatory policy objectives of the government, in both areas, are fulfilled. It is their responsibility to ensure that OSH and marine operational safety are complementary and mutually reinforcing. These responsibilities are communicated in a Memorandum of Understanding that also details administrative and enforcement agreements.

MARINE OSH REGULATIONS NOW UNDER REVIEW

This year, a comprehensive review of the thirteen parts of *the Marine Occupational Safety and Health Regulations* began. A Working Group was struck and its inaugural meeting took place, in May, at the Canadian Maritime Advisory Council (CMAC). The consultative approach adopted is that of a bipartite nature. This is a departure from the process that has been relied upon at CMAC since its inception. In this process, it is up to labour and management to reach consensus on issues that may result in changes to the Regulations, provided that they fall within all of the following principles:

1. must be within the parameters of the *Canada Labour Code;*

2. must be administratively and technically feasible;

3. must take into account practicalities of enforcement and financial implications; and

4. must follow principals of legal drafting, the *Statutory Instruments Act,* the *Interpretations Act* and the *Charter of Rights and Freedoms.*

It is expected that the overall process to facilitate this comprehensive review will continue for the next several years. For regular updates on this Review and other information on the Marine Occupational Safety and Health Program, please visit our website at **www.tc.gc.ca**.

The next OSH Explanations article will report on Marine Safety's discussions with the territorial and provincial governments on fishing vessel safety.

Contributor: Bob Gowie, Technical Advisor – OSH and Regional Safety Officer, Ottawa
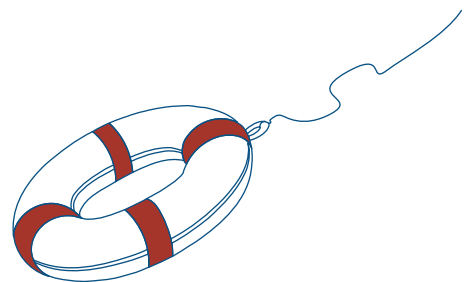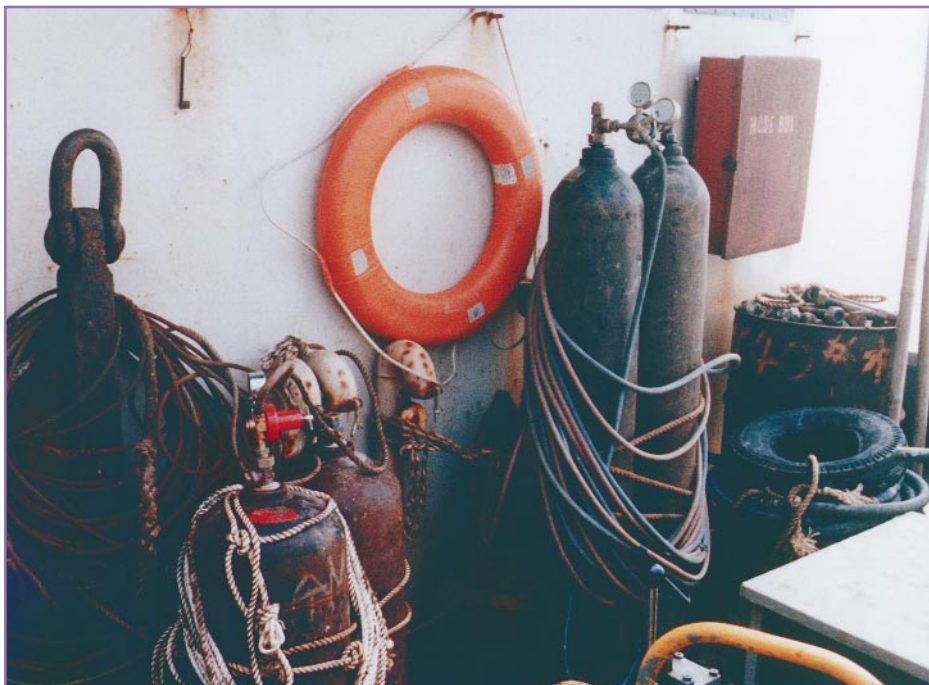
Interim program for passenger vessel compliance

A change in the definition of "passenger" under the *Canada Shipping Act* may affect a number of owners and operators of vessels operated as charter vessels. Under the definition that entered into force on October 31, 1998, these vessels will now be required to meet more stringent passenger vessel requirements.

To give industry a reasonable amount of time to comply with the applicable passenger vessel requirements, Marine Safety has introduced an interim program that allows charter vessels to continue operating under a "Notice of Survey".

The interim program is in effect nationally from June 9, 1999 to December 31, 2000. It covers:

- conventional monohull vessels over 8.5 metres in overall length;

- vessels that weigh between 5 and 60 gross registered tonnage; and

- vessels that carry up to 49 passengers.

Future Ship Safety Bulletins will provide details on the program, and the program will be promoted widely. In the meantime, you can obtain further information on the Transport Canada Web site at **http://www.tc.gc.ca** or from any Marine Safety Office.

Marine Captain honoured with safety award

"A tireless advocate of marine safety." That's how Transport Minister David Collenette described Captain John Greenway as he presented him with the Transport Canada Marine Safety Award at the Canadian Marine Advisory Council (CMAC) meeting in Ottawa on May 7, 1998.

Recognized for his efforts in developing and improving marine training and safety standards, Captain Greenway's contributions have greatly benefited Canada's shipping industry.

Captain Greenway began his seagoing career over 20 years ago. Currently General Manager of Operations for Upper Lakes Group Inc., he is also a member of the International Shipmasters Association; a council member of the Company of Master Mariners; an associate member of the Canadian Institute of Marine Engineers; and a member of CMAC.

His efforts with numerous working groups and committees, his representation on behalf of the Canadian marine industry at International Maritime Organization conferences, and his active participation in the CMAC process at both regional and national levels has had an impact on such areas as lifesaving equipment, radio communications, certification and training, navigation safety, pollution prevention and bulk carrier safety.

Capitain Greenway receives Marine Safety award from David Collenette, Transport Minister.

Established to stimulate awareness of marine safety in Canada, the Transport Canada Marine Safety Award recognizes persons, groups, companies, organizations, agencies or departments that have contributed in an exceptional way to this objective. Captain Greenway's outstanding contribution to Canadian maritime safety makes him a most deserving recipient of this award.

The International Safety Management Code in brief

Adopted to improve management standards in the shipping industry, the International Safety Management (ISM) Code promises to be an effective tool for enhancing the safety of life at sea and the protection of the marine environment.

On July 1, 1998, Chapter IX of the International Convention for Safety of Life at Sea (SOLAS) made the ISM Code mandatory for high-speed passenger craft, oil tankers, chemical tankers, gas carriers, bulk carriers and high-speed cargo vessels of 500 gross tonnage or more, engaged on international voyages. The Code will become mandatory for cargo vessels and mobile offshore drilling rig units of 500 gross tonnage or more on July 1, 2002.

The main objectives of the Code are to ensure:

- safe practices in ship operation;
- a safe working environment on board;
- safeguards against identified risks;
- continuous improvement of the safety management skills of shipboard and onshore personnel, including preparation for emergencies related to safety of life and environmental pollution; and
- compliance with all mandatory rules and regulations, as well as codes, guidelines and standards recommended by the International Maritime Organization (IMO), Classification Societies, Flag State governments and other Maritime authorities.

The Code provides a framework that ship owners can follow to establish a safety management system (SMS) that will best suit their own operations. Each SMS must include a safety and environment policy that provides instructions and procedures for safe ship operation; an emergency response plan; a system for reporting accidents and hazardous incidents; and procedures for internal audits and management reviews.

In addition, the SMS must clearly define the levels of authority and lines of communication between and amongst onshore and shipboard personnel, including the appointment of a designated person who will have access to the senior management of the company. Ship owner/operators are also required to produce a safety management manual, copies of which are to be kept on board ship.

Flag States are responsible for ensuring that ship operators comply with the ISM Code. Companies are periodically audited to verify that their SMS complies with the Code. Those companies that comply are issued a Document of Compliance (DOC). Individual vessels are also periodically audited and are issued a Safety Management Certificate (SMC) if they comply. These ISM Code certificates are issued by the Flag State Administration, or by an organization (such as a ship classification society) recognized by the Administration to act on its behalf.

Transport Canada proclaimed the *Safety Management Regulations* under the *Canada Shipping Act* in order to implement the ISM Code for Canadian-registered ships. To date, ISM Code certificates have been issued to approximately thirty vessels and a dozen shipping companies.

These new regulations also permit the Minister of Transport to enter into agreements with recognized organizations to perform the certification required under the ISM Code.

The organizations identified in the regulations for this purpose are five of the major international ship classification societies active in Canada: Lloyd's Register of Shipping, American Bureau of Shipping, Det Norske Veritas, Germanischer Lloyd and Bureau Veritas.

On July 20, 1999, Transport Canada signed formal delegation agreements with these five ship classification societies. The Marine Safety Directorate will be responsible for overseeing the activities carried out by the classification societies under these agreements.

The ISM Code is enforced for foreign ships visiting Canada under the Canadian Port State Control Inspection regime. Ships are detained if they do not have a certificate, or if the certificate is invalid and/or if major non-conformities in the safety management system are identified. Detentions are lifted once action has been taken to rectify deficiencies.

The IMO is also notified of any detentions and the ship's name is published in a quarterly detention list. Starting in the third quarter of 1999, a monthly detention list will be published.

Given that the ISM Code has only been in force for less than a year, it is still too early to comment on its effectiveness. However, companies with similar safety management systems in place prior to the coming into force of the ISM Code have reported a reduction in the number of accidents, as well as a decrease in the loss of person hours, and costs and delays caused by detentions, emergencies and damage repairs.

Safety system makes its debut

Thanks to a new distress and safety system, which came into effect in February 1999, Canada's international mariners can expect a quicker and more accurate response to emergencies at sea.

The Global Maritime Distress and Safety System (GMDSS) uses the latest in terrestrial and satellite communication technology. This new system improves the probability of survival of distressed mariners by ensuring a rapid, automated alerting of shore-based and seaborne resources, and automated distribution of Maritime Safety Information (MSI).

EQUIPMENT REQUIREMENTS

Under the GMDSS, the distress communications equipment required to be carried by a ship is based on the area in which it operates rather than its size, as was the case in the past (see sidebar). This requirement is determined by a ship's capability to perform the following functions in conjunction with shore-based resources:

- sending distress calls automatically and manually along with the ship's identity and location;

- receiving distress alerts automatically;

- initiating and carrying out communications;

- communicating with Search and Rescue (SAR) forces and survivors; and

- receiving MSI automatically.
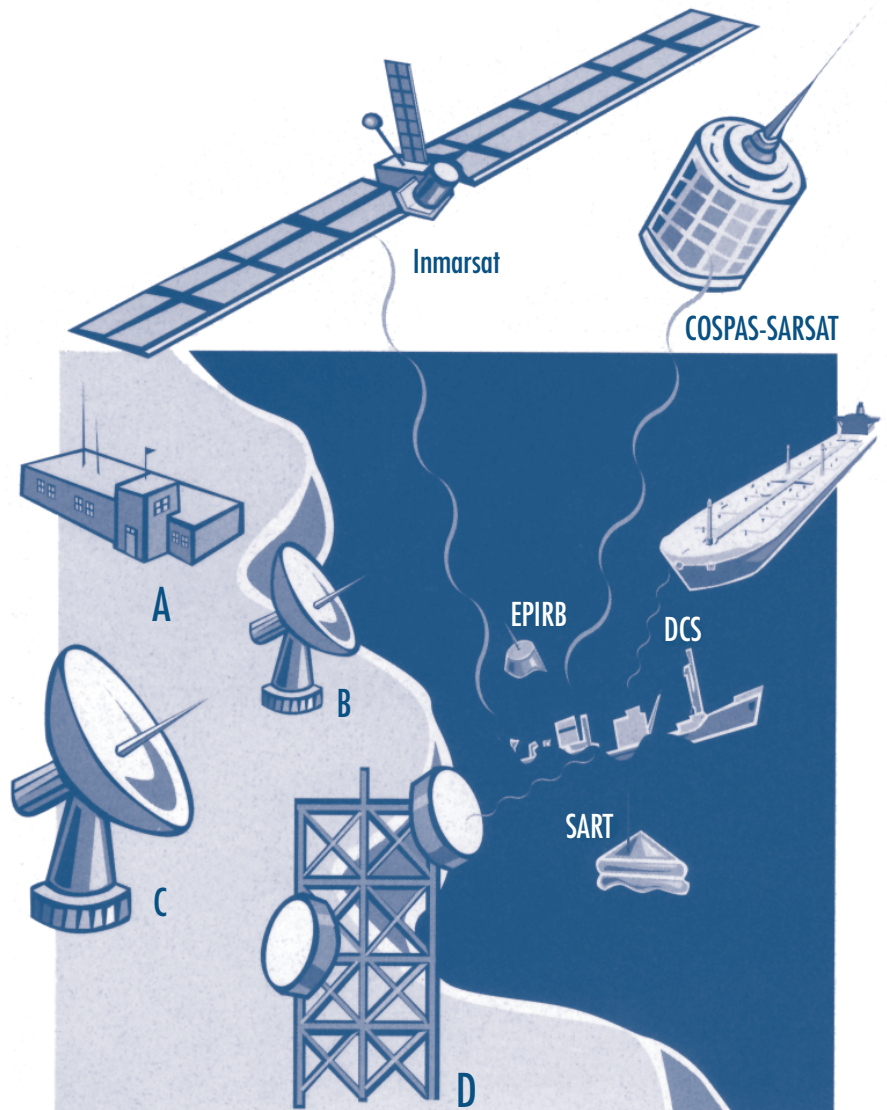
Legend:

A. Rescue Co-ordination Centre
B. Inmarsat Coast Earth Station
C. COSPAS-SARSAT Local User Terminal
D. Coast Radio Station HF, MF, VHF

For some smaller Canadian passenger vessels operating on short international voyages, compliance with the Code has proved onerous. To address this issue, a policy will be developed to make compliance with the ISM Code more equitable for this category of vessels.

Although compliance with the ISM Code is not mandatory for the Canadian domestic fleet (i.e., those vessels not subject to the SOLAS Convention), the Code nevertheless holds considerable promise for improving safety in the marine industry and for this reason Transport Canada fully supports its voluntary adoption.

The evolution of a sound safety culture will pay dividends in terms of improved efficiency and a safer working environment, to the benefit of both employees and clients.

Contributor: Sultan Virani,
Senior Marine Surveyor,
Pacific Region

In addition to these requirements, SAR services must also be capable of locating the distress signal.

The GMDSS uses two main technologies – the Emergency Position Indicating Radio Beacon (EPIRB) and Digital Selective Calling (DSC).

The EPIRB is a small, light, portable and float-free device that operates on four different frequencies – VHF, 121.5 Mhz, 406 Mhz and 1.6 Ghz. The 121.5 and the 406 Mhz EPIRB relay the signal to the COSPAS-SARSAT satellites, which can calculate the position of the EPIRB. The 1.6 Ghz satellite operates via the INMARSAT satellite and requires updated positions for transmission. For this reason, it is generally coupled with the global positioning system (GPS).

The DSC system works like a telephone system. To establish contact, one dials the number of the station called, and only that station will be alerted. In the past, calling another station meant putting out a call for the station on the calling frequencies and hoping the operator at the station was on watch. Once contacted, arrangements could be made to change over to a working frequency.

Because the DSC system enables the working frequency to be indicated, the next contact is directly on the working frequency. This ensures direct calling, alerting and low usage of the calling frequencies. Group and geographic calls are also possible.

HERE'S HOW THE GMDSS OPERATES:

A vessel in distress can raise an alert on any of its communication systems, either by calling a specific shore station or by a general alert. In case of time constraint, the EPIRB can be activated, or if a vessel sinks, the float-free EPIRB will automatically activate. This will alert the satellite, which in turn will alert the Coast Earth station or Mission Control

The GMDSS sea areas

Traditionally, requirements for distress communications equipment on ships has been based on the size of the ship, with larger ships requiring more equipment. This was an anachronism, as it was the smaller ships that tended to be more severely affected by distress situations and had less time to send out a distress alert.

Under the GMDSS, the equipment required to be carried by each ship is now based on the ship's area of operation. For this purpose, the world's seas have been divided into four areas, with the equipment requirements for each area specified, regardless of vessel size.

- **Sea Area A1** – the area within the range of a shore-based VHF DSC coast station (approximately 40 NM).

- **Sea Area A2** – the area within range of a shore-based MF DSC coast station, excluding area A1 (approximately 150 NM).

- **Sea Area A3** – the area within the coverage of an INMARSAT geo-stationary satellite, excluding areas A1 and A2, where applicable (approximate range 70° N to 70° S).

- **Sea Area A4** – the remaining areas outside of areas A1, A2 and A3 (polar regions).
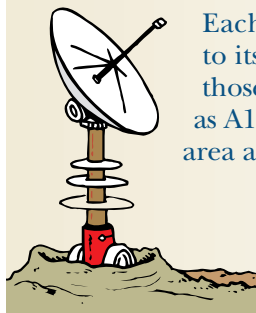
Each Flag State must declare the areas contiguous to its coast and provide the required facilities to serve those areas. Canada has proposed to declare its sea areas as A1, with the remaining area as A3 and the northern area as A4.

Contributor: Philip D'sa,
Senior Marine Surveyor, Pacific Region

Centre. The Coast Earth station then alerts the Rescue Co-ordination Centre. A distress alert received from any source will be sent to the Rescue Co-ordination Centre, which will mobilize its resources for rescue. The preliminary location is determined through the position obtained via the satellite, while the final position is located either through the SART, or the 121.5 Mhz homing beacon.

LOOKING AHEAD

Transport Canada Marine Safety is currently drafting regulations to implement the GMDSS within Canada. It is also developing new shipboard radio carriage requirements for domestic vessels, along

with new technical and operational requirements. Since December 1994, the Canadian Marine Advisory Council's (CMAC) national working group has met biannually to review and assist in the development of requirements that will best allow Canada's domestic ships to participate in and support the GMDSS.

That's good news for Canada's mariners. In the event of an emergency at sea, the GMDSS will help to minimize the loss of life, severity of injuries and damage to property, as well as the cost of search and rescue efforts.

Marine Safety Examiners' Meeting

Marine safety senior examiners, representing both nautical and engineering disciplines from head-quarters and each of the regions, gathered in Ottawa in April for a three-day meeting to plot the course of marine training and certification in Canada.

Bud Streeter, Director General Marine Safety, opened the joint session acknowledging that there was much work to be done before February 1, 2002, the end of the transition period for the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1995 (STCW95). During his discussion of the overall changes to the way Marine Safety business is carried out, he emphasized the importance of helping inspectors meet future challenges and highlighted the key role of communication in ensuring uniform interpretation and application of policies and regulations across the country.

Several very important issues were also addressed during both the joint session, chaired by Gerard McDonald, Director Certification and Pilotage, and the separate nautical and engineering examiner meetings chaired by John Clarkson and Bal Gandhi, respectively. Discussions ranged from the impact of STCW95 and the resultant amendments required to the *Crewing and Certification Regulations,* to the urgent need for harmonization of the interpretation and application of regulations.

Examiners were also given a glimpse of the proposed new Certificates of Competency that will be introduced under recommendations outlined in STCW95. The certificates will resemble passports and include a photograph of the certificate holder.

What's New

PROGRAM SERVICES TAKES ON NEW ROLE IN IT/IM

Change has been a constant in Marine Safety over the past year: we've gone through a major reorganization and we've all taken on new roles and responsibilities. Ultimately, the alignment of our new business functions will bring us closer to our vision of being a world-class marine safety organization.

As part of the new organizational structure, the Program Services Branch has now taken on the role of Information Technology and Information Management (IT/IM) for Marine Safety.

The IT/IM Unit is responsible for:

- managing headquarters records, and setting up and maintaining the Reference Centre;

- acting as custodian and administrator of the Ships' Plan Approval files and database;

- converting certificates to electronic format and maintaining a repository of Marine Safety certificates and forms;

- development of an IT framework to interface Marine Safety databases;

- coordinating and liaising with users, Corporate Informatics Group and consultants on maintenance contracts, Y2K initiatives, and system upgrades and development;

- developing and maintaining Marine Safety and Program Services Web pages and responding to/redirecting Marine Web inquiries; and

- multi-media publishing and distributing of Marine Safety material, including Transport Publications, Ship Safety Bulletins, Board Decisions, Strategic Plan Updates, and the *Marine Safety Review* newsletter.

Program Services' goal in this new role is to develop and implement sound information management practices within Marine Safety. These practices will use existing and future information technology to better support headquarters and regional business needs and client demands.

Already the new Unit has identified national IT/IM issues and requirements in order to plan appropriate services for Marine Safety, which address issues and priorities for this fiscal year and beyond. High on the list are development, upgrade and integration of new and existing database applications, which collect and record valuable information on ships and their personnel. Challenges are ahead in finding better ways to serve clients, studying and improving work flow, integrating new Web-based applications and increasing bandwidth to enable better remote access.

Full steam ahead to the future!

Life in Ontario Region

Like Transport Canada's other regions across the country, Ontario Region is unique, with a regional flavour all its own. This uniqueness makes administering the department's various programs, and especially the Marine Program, a challenge.

Among other interesting features, Ontario boasts the Great Lakes, the largest body of freshwater in the world; a major portion of the St. Lawrence Seaway; a large area that encompasses Canada's southern and northern regions, including the southern portion of Hudson Bay and the western shores of James Bay; diverse weather; a shared border with the United States; and a large population.

And as with Transport Canada's other regions, Ontario Region has tackled the challenges of new technology and reorganization, which has demanded tremendous commitment and willingness to change from all employees.

Here's a look at life in Ontario for our Marine Safety colleagues.

THE GREAT LAKES – ST. LAWRENCE SEAWAY SYSTEM

The Great Lakes are a major influence on the people of Ontario and the raison d'être for the Marine Safety presence in the region. Ontario Region oversees marine safety in all of the Great Lakes, except Lake Michigan (which is entirely within US territory), as well as the southern portion of Hudson Bay, including the western shores of James Bay. The regional Marine Safety staff of 45 inspect the largest section of the total Canadian domestic fleet and conduct Port State control inspections on visiting foreign vessels. Since the Lakes are the source of drinking water for central North America, pollution prevention is also a main concern.

In addition, the lakes provide shippers with a link to the industrial heart of North America, through the St. Lawrence Seaway system. The St. Lawrence Seaway feeds ocean-going vessels into Ontario ports, enabling the export of Prairie wheat and other bulk cargoes directly to Europe and beyond. A ship's passage through the system from one end of Ontario to the other takes the average vessel about four days to cover approximately 1,930 kilometres (more than 1,200 miles). Saltwater ships are raised more than 180 meters (nearly 600 feet) above their accustomed sea level.

ONTARIO MARINE SAFETY IN ACTION

The Sarnia Transport Canada Centre (TCC) is truly a Transport Canada office, with three branches sharing space there. All office services are shared among the branches, and a "hotel station" accommodates any visiting personnel.

And that's not all that's shared in Ontario Region. We strongly support multimodal initiatives by having our marine inspectors accompany their counterparts from Surface, Aviation and Security in their work and hosting inspectors from the other modes in shipyard and shipboard visits.

In addition, our offices in Thunder Bay, St. Catherines, Collingwood, Toronto and Kingston all contribute to the regional program as well as the day-to-day district functions. Ship Registry, our marine presence in the TC headquarters in Toronto, covers registration functions for the whole province.

Working with other regions is also an issue because harmonized regulatory enforcement between Ontario and neighbouring regions is crucial. Several consultative meetings have taken place in the past two years, resulting in an interregional surveyor exchange program between Ontario and Quebec. This program is intended to familiarize our staff with the differences and similarities between the regions and come up with solutions to common problems.

COMING THROUGH THE REORGANIZATION JUST FINE

Transport Canada and Marine Safety have both reorganized in the recent past, creating changes that demanded an extraordinary amount of flexibility and cooperation from staff in all regional offices. The disbanding of long-standing organizational structures and subsequent regrouping of personnel has been at once disruptive and rejuvenating, but in general, staff seem to welcome the associated challenges.

In particular, the recent amalgamation of the Sarnia regional and district offices to form the new Sarnia TCC has been a dominant time and resource consumer.

WINTERS ARE BUSY TOO

Although it might seem that winters in Ontario would allow the regional offices a little "down time," this simply is not the case. We put the winter months to good use, providing staff in Ontario Region with much-needed training.

For instance, our marine inspectors have participated in such nationally delivered courses as *Pollution Prevention*

Officer, International Safety Management and *Investigative Techniques.* Newer marine inspectors participated in such in-house courses as *Steamship Inspectors, Port Wardens, Port State Control Officers, Examiner of Masters and Mates* and *Examiner of Marine Engineers.*

In addition, the region offered non-technical training sessions on *Conflict Resolution, Diversity, UCS evaluators* and upgraded computer skills. All marine branch managers also attended a regionally sponsored *Leadership Course,* and two staff were placed on the *Transport Canada Management* course.

COOPERATING ACROSS BORDERS

By necessity and by choice, Marine Safety in Ontario maintains a strong relationship with the United States Coast Guard and US Department of Transportation. This partnership includes participation in many bilateral functions such as U.S.C.G. Marine Community day in Cleveland and the St. Claire/Detroit River Working Group.

We also frequently meet with colleagues across the border to discuss mutual issues and concerns, such as the St. Lawrence Seaway, joint ship inspections, the operation of

high-speed craft on internationally shared waterways and Great Lakes Water Quality issues through the International Joint Commission. Our old ties to Canadian Coast Guard are continually being refined to offer the best possible joint service to the marine community. These meetings enhance marine safety in the Great Lakes region, further Transport Canada's objectives and raise the international profile of the department in general and Marine Safety in particular.

We are also active on the international front, considering our land-locked location. For the second year in a row we provided an expert guest lecturer to the International Maritime Organization college in Italy.

NEW AND EMERGING TECHNOLOGY

Ontario Region is the "National Centre of Excellence" for hovercraft, which is keeping us busy putting together practical standards for the design, construction and operation of these craft.

Ontario also has a strong interest in the operation of other high-speed passenger craft. With four hydrofoils and a passenger catamaran currently registered in the region and plans

to import more of these vessels, including a large passenger hovercraft that will offer service across the Great Lakes, our involvement is growing along with the expanding industry.

A GREAT PLACE TO WORK

Overall, Transport Canada's Ontario Region is a great place to work, mainly due to its progressive and dedicated staff and the diverse nature of the marine industry here.

Contributor: Phil Nelson, Regional Director, Ontario Region

In another new initiative, headquarters announced it will contract a private company to conduct a review of current examination practices in an effort to bring in more effective, modern methods of assessing candidates.

The meeting closed with a joint session in which participants finalized decisions and agreed to continue to work to resolve outstanding issues through consultations with the Canadian Marine Advisory Council and through other similar forums. It was definitely a positive step toward our goal of becoming a world-class marine safety organization.

Contributor: Gurbir Rangar, Technical Officer, Nautical, Ottawa