



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Canadian  
Coast Guard

Garde côtière  
canadienne

# Canadian Coast Guard 2010–2011 FLEET ANNUAL REPORT



*Saluti Primum, Auxilio Semper*  
*Safety First, Service Always*

Canada 

On the cover: *CCGS Cape Ann*, Search and Rescue lifeboat conducts training off Tofino, B.C.  
Photo: David Ashurst

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# Message from the Director General, Fleet, Canadian Coast Guard

As the Canadian Coast Guard begins celebrating its 50th anniversary, I am proud to present Fleet's annual report. This fifth annual report, which covers the period from April 1, 2010, to March 31, 2011, represents a new opportunity for us to reaffirm to Canadians, our clients, employees and all of our stakeholders our principal mission, which is to support the government's priorities and contribute to economic prosperity and to the safety, accessibility and protection of Canadian waters.

Let us not forget that Canada is a coastal nation with the longest coastline and largest archipelago in the world and is a nation whose domestic maritime systems include the St. Lawrence Seaway and Great Lakes along with Lake Winnipeg and the Mackenzie River. This presents significant challenges. I am referring in particular to the challenges associated with more urgent security needs along this immense frontier and the challenges associated with providing services such as search and rescue, icebreaking and environmental response in severe climate conditions. There is also increased maritime traffic in the Arctic due to climate change and increased exploitation of natural resources.

In the face of all of this, our employees' professionalism, excellence and dedication have enabled Fleet, during the 2010–2011 fiscal year, to continue meeting these challenges. Additionally, Fleet continues to be an organization that learns and operates in a dynamic environment and is able to demonstrate considerable flexibility and serve a wide variety of clients.



Photo: I. Roberts

Mario Pelletier  
Director General, Fleet  
Canadian Coast Guard

The Fleet's activities are the mechanism for carrying out Coast Guard's and Canadian government's mandate at sea. They are entirely client oriented and result directly from their requirements. That is why we have devoted a large part of this report to demonstrating how we have optimized our resources to improve our services and capacities. In 2010–2011, 69.1 percent of Fleet's services were intended for Coast Guard programs. This represents an increase of over 3 percent relative to the 2009–2010 level. Overall, Fleet provided 95 percent of the time originally estimated in its Integrated Fleet Operations Plan.





Whether by escorting commercial ships through the ice to ensure access to northern communities, ensuring the delivery of food, merchandise and fuel to remote sites, or even supporting the delivery of search and rescue services, Fleet has contributed to the four priority sectors identified in the Northern Strategy, namely exercising our Arctic sovereignty, promoting social and economic development, protecting our environmental heritage, and improving and devolving northern governance.

The Canadian Coast Guard has made significant progress in a number of areas over the past year; however, there is still much to do. Now more than ever, we are determined to

ensure that Fleet employees benefit from the resources, equipment, professional development and skills that they need to continue serving Canadians.

I hope that this edition of our Fleet Annual Report will be an enlightening summary of our activities during 2010–2011.

*Safety First, Service Always,*

original signed by

Mario Pelletier  
Director General, Fleet  
Canadian Coast Guard

# 1 What Fleet Does Every Day

Through its service to Canada's commercial fishing, maritime transportation, shipping and tourism industries as well as to Canada's recreational boaters, the Canadian Coast Guard's fleet of red and white ships, helicopters and air cushion vehicles is an iconic symbol of maritime safety and of the sovereignty of Canadian waters. Twenty-four hours a day, 365 days a year, Coast Guard is ready to serve across Canada's three oceans, the St. Lawrence Seaway, the Great Lakes and other inland waterways, and under some of the harshest weather conditions.

On an average day, Fleet delivers services on behalf of Coast Guard and many other government departments and agencies.

On any given day, Fleet provides the vessels and crews that:

- save 10 lives;
- assist 58 people in 26 search and rescue cases;

- service 55 aids to navigation;
- assist with the management of 2,325 commercial ship movements;
- escort four commercial ships through ice during the ice season;
- carry out 11 fisheries patrols;
- support three hydrographic missions;
- support eight scientific surveys;
- deal with three reported pollution events; and
- survey five kilometres of navigation channel bottom.

## MANDATE AND GOVERNANCE

Canada is a maritime nation whose economic prosperity relies heavily on marine transportation and resource-based industries. It has the longest coastline of any country in the world. Its ocean and inland waterways, including the Arctic, St. Lawrence Seaway and Great Lakes as well as the Saguenay and Mackenzie rivers, are critical to the transportation of its goods.



SAR officers on a Fast Rescue Craft

*The Constitution Act, 1867*, ss. 91 (9, 10) confers on the federal government the exclusive jurisdiction to govern all matters related to navigation, navigational aids (such as beacons, buoys and lighthouses) and shipping on the country’s oceans and inland waterways.

Under Fisheries and Oceans Canada’s (DFO) program activity architecture, the Fleet directorate falls under the Fleet Operational Readiness program activity. As the department’s largest program, Fleet Operational Readiness is divided into three subprograms: Fleet Operational Capability, Fleet Maintenance and Fleet Procurement. Fleet’s responsibilities and mandate are directed by the Fleet Operational Capability subprogram.

Fleet itself is not the governmental authority for any on-water programs. Rather, it serves as a mechanism for the delivery of Coast Guard and Government of Canada’s on-water mandate. Its operations are therefore 100-percent “client

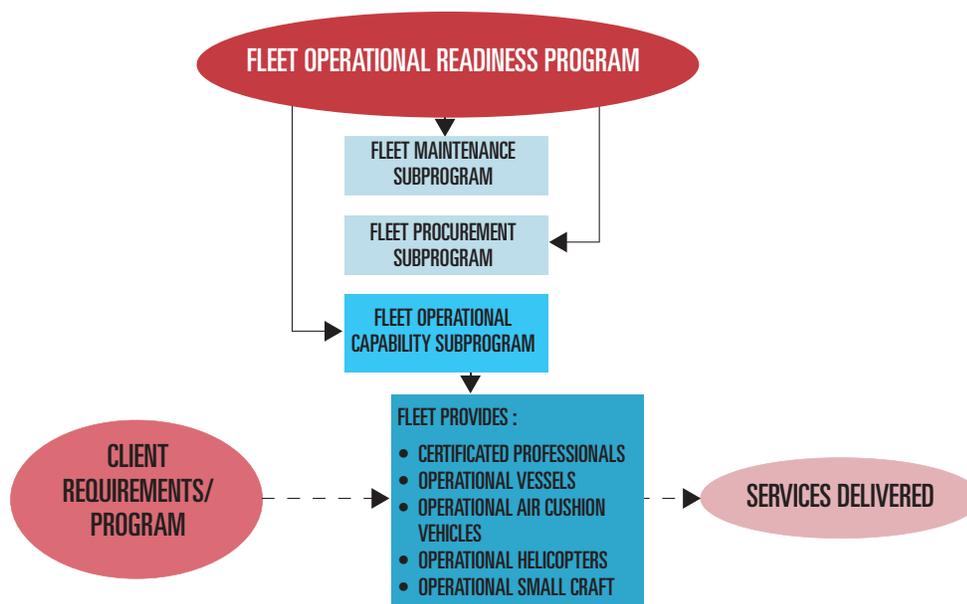
focused” and are directly linked to their requirements.

Fleet’s main responsibilities include:

- coordinating, monitoring and reporting on national Fleet service delivery and budget;
- identifying mission and operational requirements for current and future vessels, and establishing the associated directives, policies and activities in support of Fleet operations, including monitoring;
- auditing vessels, establishing policies, ensuring continuous improvement, monitoring performance and managing the Fleet Safety and Security Management System; and
- human resources planning and professional development for seagoing personnel, certification, recruitment, retention, collective bargaining, union and operational human resources management issues.

Figure 1 illustrates how Fleet serves as a mechanism for the delivery of its clients’ programs.

**Figure 1:**  
*Fleet as Enabler*



## 2 Fleet Operations and On-Water Program Delivery

Fleet clients include the operational Coast Guard programs, which are developed and managed by the Maritime Services directorate. These programs are: Search and Rescue, Environmental Response, Marine Communications and Traffic Services, Aids to Navigation, Icebreaking Services, and Waterways Management.

Fleet also supports its Fisheries and Oceans Canada (DFO) clients, which include the Ecosystems and Fisheries Management, specifically Fisheries Management as well as Conservation and Protection, and the Ecosystems and Oceans Science (formerly known as Fisheries and Oceans At-Sea Science) sectors.

Finally, as the federal government's only civilian fleet, Coast Guard vessels provide on-water support for the mandates of other government departments and agencies. Among these organizations are: the Royal Canadian Mounted Police, the Department of National Defence, Public Safety Canada, Canada Border Services Agency, Transport Canada, Environment Canada, Natural Resources Canada and many more.

### PROGRAM DELIVERY

Each year, a significant amount of work is put into the creation of the Integrated Fleet Operations Plan. This plan represents the backbone of Fleet's operations and on-water



CCG employees at work on an Offshore Fishery Science Vessel

program delivery. Its creation involves consultation with Fleet clients, both internal and external to DFO, in order to determine demand for Fleet vessel and helicopter support in the execution of programs at sea. Based on available resources and client requirements, a schedule of planned operational days<sup>1</sup> is allocated to each client and is agreed upon by both parties.

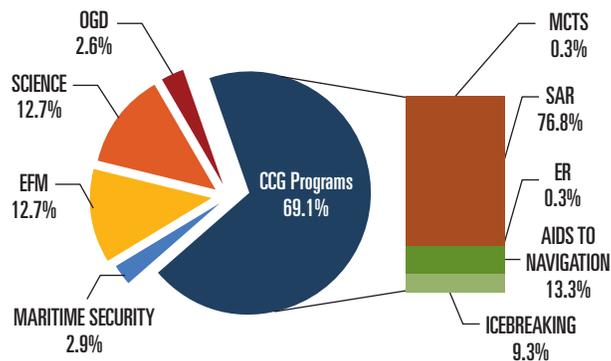
Graph 1 illustrates the distribution of Fleet's clients for fiscal year 2010–2011. It shows that Fleet dedicated most of its service to Coast Guard programs. At 69.1 percent, this represents an increase of over three percentage points since 2009–2010. The largest proportion of service was delivered to the Search and Rescue (SAR) program. Other Coast Guard programs include Environmental Response (ER), Marine Communications and Traffic Services (MCTS), Aids to Navigation and Icebreaking Services. In 2010–2011, Fleet dedicated slightly less to DFO programs administered by the Ecosystems and Oceans Science (Science), and the Ecosystems and Fisheries Management (EFM)



CCGS *Cap Breton*, SAR Lifeboat  
Photo: S. Boniecki

## Graph 1:

### *Distribution of Fleet Clients, 2010–2011 (% of Total Operational Days)*



sectors, which received 12.7 percent each, compared with 13 percent for Ecosystems and Oceans Science and 13.4 percent for Ecosystems and Fisheries Management in the previous year. Finally, the remaining Fleet resources were allocated to other government departments and agencies (OGD) and to the Maritime Security Enforcement Teams, with 2.6 percent and 2.9 percent, respectively, which also represent a reduction from the 2009–2010 levels.

## Effective Delivery

Effectiveness is a concept used to assess the extent to which an organization is meeting its expected results. Fleet has developed various measures to evaluate its effectiveness, including the comparison of services planned against services delivered, as well as operational delays.

By comparing the actual services delivered with what was originally planned, Fleet is able to measure the performance of service delivery. Where actual services delivered exceed 100 percent, it means either the demand was

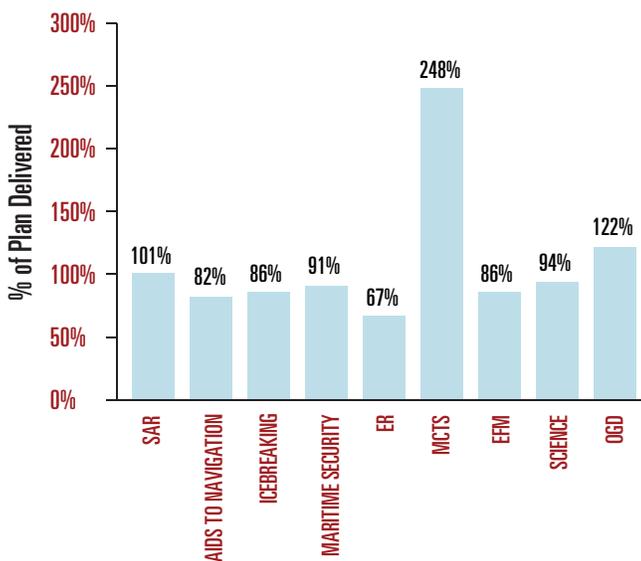
<sup>1</sup> In this report, "operational days" refers to time measured in "non-weighted operational days" or "elapsed days." Elapsed days are defined as the total number of days requested by and delivered to individual clients. Because assets may be engaged in overlapping and/or successive activities for different programs, it is possible to record more than 24 hours in any given day. However, the total time recorded in one day should exceed 24 hours only when a vessel is multitasked with one or more programs.

higher than expected or unforeseen events required more days to be delivered. Values under 100 percent indicate that Fleet underdelivered relative to the plan; potential causes include vessel unavailability due to breakdowns and unforeseen events, such as being diverted to Search and Rescue responsibilities, that prevent the delivery of services as planned. The normal tolerance range is plus or minus 10 percent, given operational, environmental and program fluidity.

Overall, Fleet delivered 95 percent of the originally planned number of days, down from 103 percent in 2009–2010. As displayed in Graph 2, there have been significant variances between individual programs. Services delivered to Search and Rescue, Maritime Security and Oceans Science programs were all within the tolerance range. Service delivered to Icebreaking and Ecosystems and Fisheries Management fall within the reasonable tolerance level. Time spent delivering other government department

## Graph 2:

### *Service Delivered versus Service Planned by Fleet Clients, 2010–2011*



Environmental Response barge at a marina

programs was significantly higher than normal this year, which can be explained by the federal government's increased emphasis on its Northern Strategy.

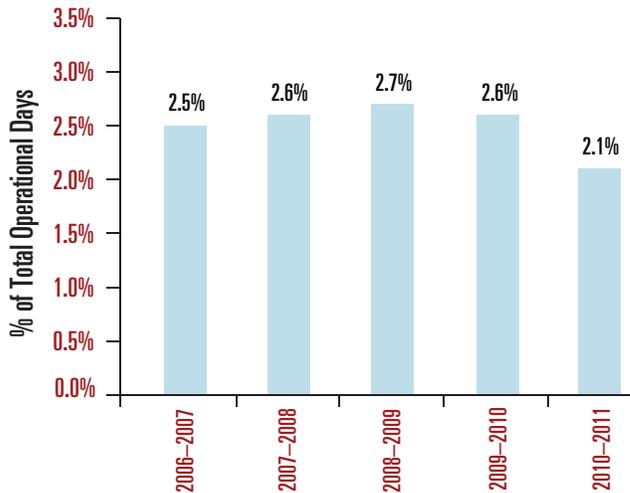
Because of factors such as inclement weather, equipment breakdown, delays related to equipment or personnel, and administrative reasons, time at sea occasionally can be lost. This lost sea time is referred to as "operational delays," which Fleet measures to assess its overall effectiveness in providing operational on-water resources.

Graph 3 shows that services were delivered in a very effective manner in 2010–2011, with operational delays at the lowest point of the past five years at only 2.1 percent (607 days) of overall availability. In 2010–2011, the majority of lost time was attributed to weather delays, which accounted for 59 percent (361 days) of the total; this figure is lower than the five-year trend. Fleet clients most affected by delays were Aids to Navigation (29 percent, 174 days), Ecosystems and Fisheries Management (28 percent, 172 days) and Ecosystems and Oceans Science (28 percent, 170 days).



**Graph 3:**

*Service Time Lost Due to Delays, 2006–2007 to 2010–2011 (% of Total Operational Days)*



**Efficient Delivery**

The Coast Guard fleet as a whole operates 24 hours a day, 365 days a year. However, each individual vessel rarely operates at that capacity because of various factors such as planned maintenance, vessel breakdown, crew change or lack of program demand. Fleet is always focusing on maximizing the number of days our ships are assigned to clients by delivering services in an efficient manner. Efficiency is about how well Fleet uses its time and resources to deliver services. It uses vessel availability and multi-tasking as performance indicators to determine how efficiently services are delivered.

**Vessel Availability**

At any given time, a vessel may be available or unavailable for operations. When a vessel is available, it can be assigned to a client, multi-tasked, engaged in administrative or other tasks such as community and visitor relation activities, or simply unassigned. A vessel may be unavailable due to winterization, laid up due to

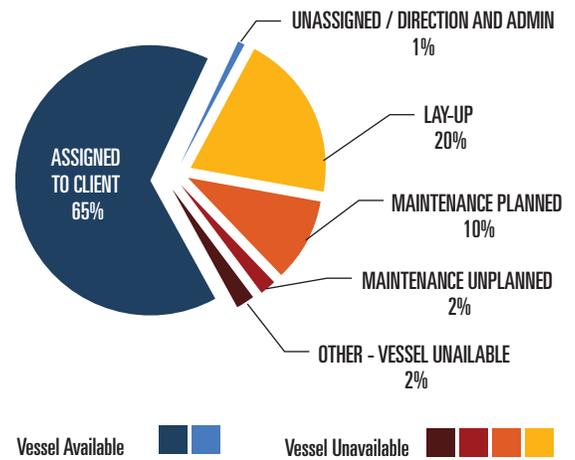
lack of funds or undergoing extended refit or maintenance.

As indicated in Graph 4, of all operational days in 2010–2011, Fleet spent 65 percent (29,439 days) of its time assigned to clients, which is a decrease of two percentage points from the 2009–2010 level. Fleet vessels were also ready to deliver services but remained unassigned to clients 1 percent (515 days) of the time.

Fleet vessels spent 20 percent (8,919 days) of total operational days in lay-up or winterization status, 10 percent (4,594 days) in planned maintenance, 2 percent (803 days) in unplanned maintenance and were unavailable for any other reason 2 percent (810 days) of the time.

**Graph 4:**

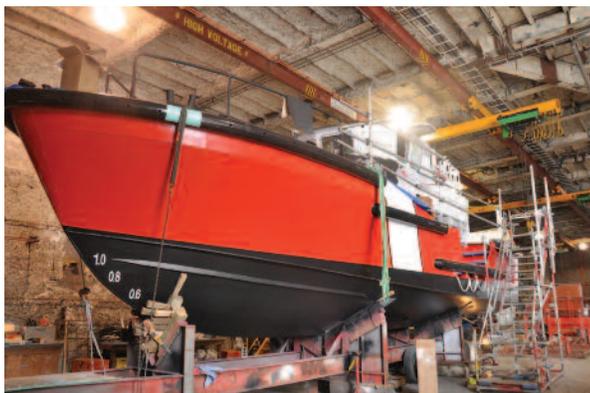
*Utilization of Vessels by Operational State, 2010–2011 (% of Total Operational Days)*



**Vessels Unavailable Due to Time Spent in Planned and Unplanned Maintenance**

One of the most important elements of delivering efficient service to clients is maintaining its fleet of vessels in good operating order. To achieve this, strategic maintenance periods are identified for each





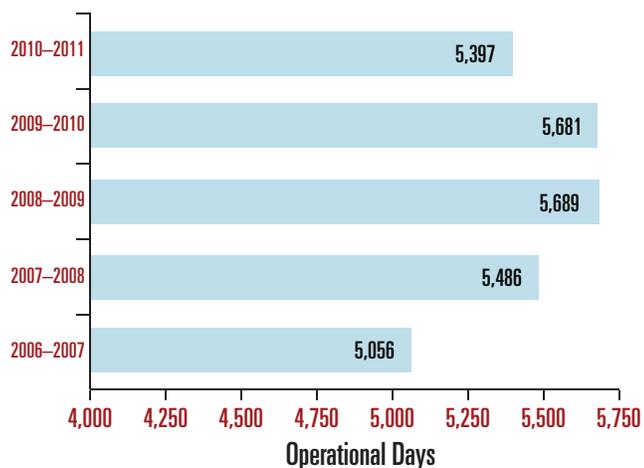
A CCG vessel under construction

vessel and are combined to create a schedule of planned maintenance. Even though the schedule is in place and every effort is made to follow it, unplanned breakdowns occur, resulting in an average loss of 3 percent of operational time every year.

As illustrated in Graph 5, the number of days spent in planned (4,594 days) and unplanned (803 days) maintenance has decreased in 2010–2011 from 4,805 days planned and 876 days unplanned in 2009–2010. This can be

### Graph 5:

*Vessel Unavailability Due to Maintenance/ Refit, 2006–2007 to 2010–2011 (Total Number of Operational Days)*



attributed to the fact that a number of older vessels were taken out of service during 2010–2011 and were replaced by new ships. In addition, large amounts of money were invested in Fleet through the Fleet Renewal Plan and Economic Action Plan in recent years, resulting in Fleet vessels that are slightly more reliable and less at risk for breakdown.

## FLEET PERFORMANCE

Under the Treasury Board Secretariat’s Management, Resources and Results Structure, government departments are required to measure and report on their performance. Fleet’s performance is based on the Integrated Fleet Operations Plan’s planned operational days relative to the actual number of days delivered. As a continuously improving organization, Fleet uses these performance results to better serve its clients.

### Internal Coast Guard Clients

Coast Guard is responsible for the management and delivery of major civilian on-water Government of Canada programs. The Maritime Services directorate is responsible for the identification and management of these program requirements, while Fleet acts as the on-water service delivery provider.



CCGS *Cap Tourmente*, SAR Lifeboat  
Photo: P. Dionne, Fisheries and Oceans Canada



CCG Fast Rescue Craft out on patrol for the Inshore Rescue Boat Service of the Search and Rescue program

### Search and Rescue

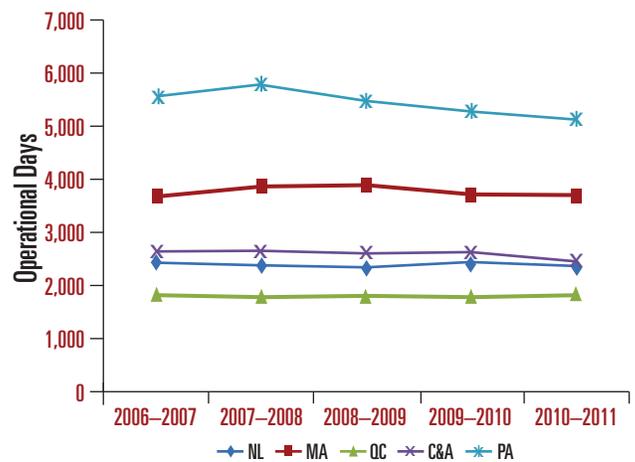
Disasters and emergencies can occur anytime and anywhere. When they happen on the water, they can quickly become life threatening. Coordinated efforts from Fleet and Coast Guard on-shore and at-sea personnel, in concert with the Department of National Defence and the Canadian Coast Guard Auxiliary (a volunteer organization), provide on-water essential services, which saved approximately 3,600 lives at risk in 2010–2011. Canadian Search and Rescue coordination centres have the immediate control and tasking of all Fleet vessels and aircraft to provide the best possible response to maritime incidents 365 days a year.

In 2010–2011, 15,333 operational days were planned for the Search and Rescue program according to the Integrated Fleet Operations Plan, and Fleet delivered 15,445 days. These days represent a slight reduction from the 2009–2010 level for Newfoundland and Labrador, Maritimes, Central and Arctic, and Pacific regions. The Québec region, however, saw a slight increase in the number of days spent on Search and Rescue. Overall, the total delivery rate was 101 percent, slightly less than the 103 percent recorded in 2009–2010.

Because of the high level of maritime activity in the Pacific and Maritimes regions, the majority of Search and Rescue services in Canada are delivered in these areas. Additionally, Pacific’s Search and Rescue coverage area is one of the largest in Canada and is ice-free year-round.

### Graph 6:

*Service to Search and Rescue by Region, 2006–2007 to 2010–2011 (Total Number of Operational Days)*

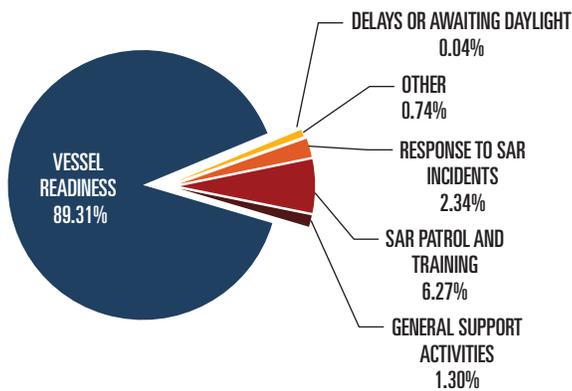


CCG Fast Rescue Craft

Because the nature of the Search and Rescue program involves saving lives, Fleet provides on-water essential services and, like police, fire and emergency medical services, must be ready to respond to calls at all times and in all places.

Because of that, 89.3 percent of the 15,445 days delivered in 2010–2011 were in “vessel readiness” status, ensuring that vessels are able to respond to Search and Rescue calls at a moment’s notice. When in “vessel readiness” status, vessels are available to support other Coast Guard activities and DFO/other government department clients on a multi-tasked basis. Other notable Search and

**Graph 7:**  
*Service to Search and Rescue by Activity, 2010–2011 (% of Total Operational Days)*

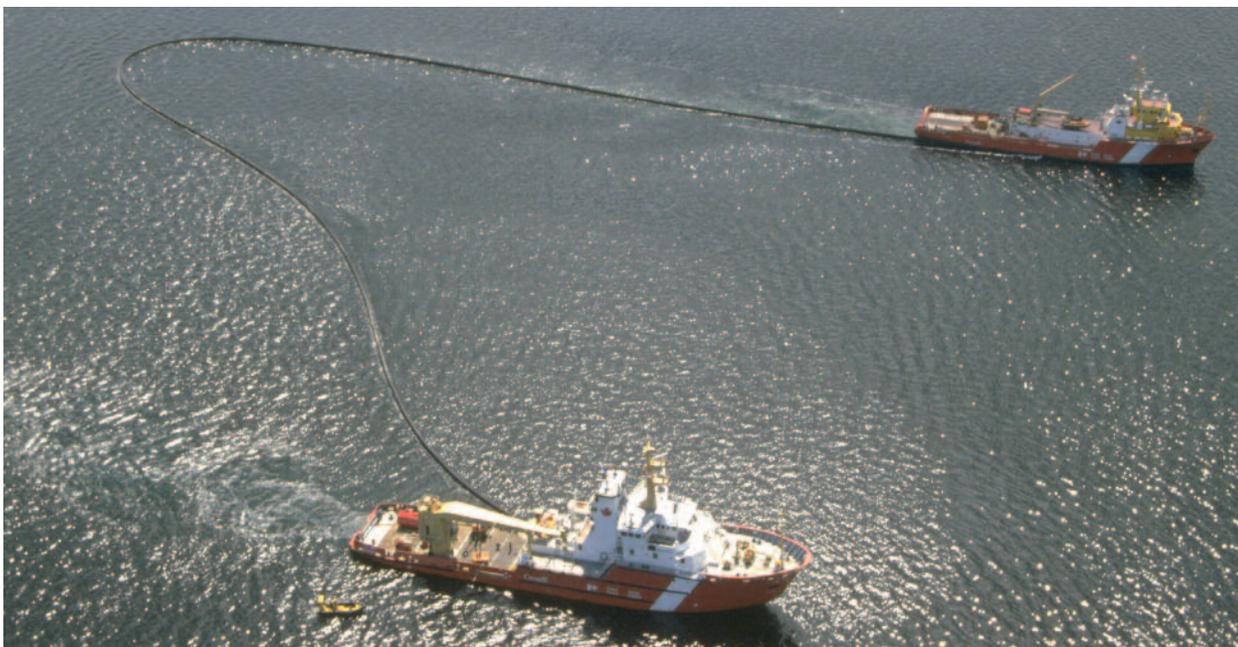


Rescue activities include 361.35 days spent on Search and Rescue incident response and 969.10 days on Search and Rescue patrol and training.

***Environmental Response***

The environment is a key priority of Coast Guard and the Government of Canada. Through the Environmental Response program, Fleet takes the lead in responding to any ship-source or mystery spills in waters under Canadian jurisdiction. Fleet and specialized Environmental Response personnel are on standby 24 hours a day, seven days a week, to investigate and respond to pollution incident reports received regionally, nationally and internationally, and to work with commercial partners to monitor and manage cleanup efforts.

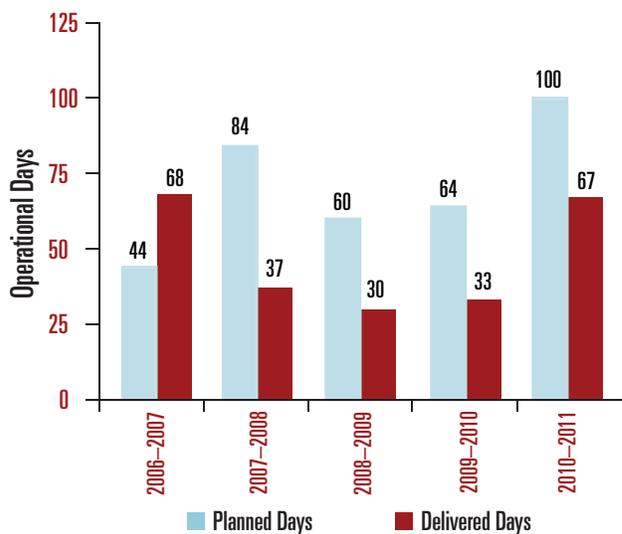
In 2010–2011, although 100 days were planned for Environmental Response, only 67 days were delivered. This represents a significant improvement over the 2009–2010 level. The increase is largely due to effort made by Fleet and Maritime Services to address recommendations in the



CCG ships conducting an environmental response exercise  
 Photo: Integrated Business Management Services

**Graph 8:**

*Service to Environmental Response,  
2006–2007 to 2010–2011  
(Total Number of Operational Days)*



report of the Auditor General designed to significantly improve Environmental Response capacity. The increase can also be attributed to an increase in the number of incidents in 2010–2011 over those of previous years.

***Marine Communications and Traffic Services***

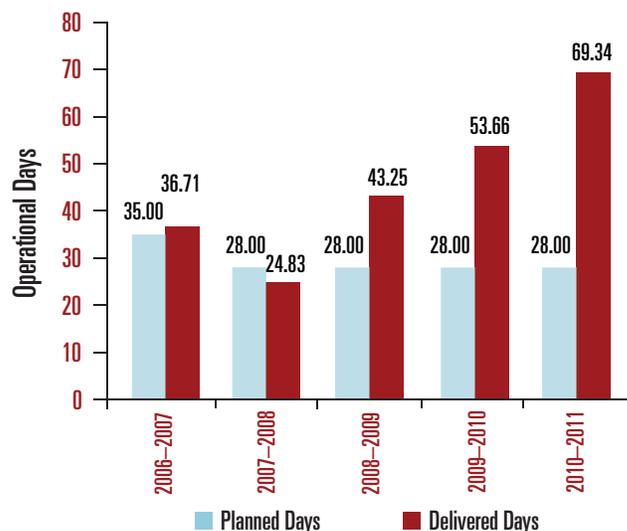
The Marine Communications and Traffic Services program provides distress and safety communications, conducts screening, regulates vessel traffic movement, and provides information systems and public correspondence 24 hours a day, seven days a week.

Although the program is delivered and managed by Maritime Services on shore, Fleet provides support to Marine Communications and Traffic Services. Each year, a number of operational days are planned in the Pacific region to support equipment-servicing activities in 14 of the region's remote locations on the Queen Charlotte Islands and central coast area, which are accessible only by helicopter. With

69 days delivered in 2010–2011, Fleet's contribution to the program increased significantly over the levels of previous years. Although time is planned only in the Pacific, Fleet has delivered days to the Marine Communications and Traffic Services program in every region except the Maritimes, for similar reasons. Of the 69 days delivered, 40 were in Pacific, 20 were in Québec and the remaining nine were in the Central and Arctic regions.

**Graph 9:**

*Service to Marine Communications and Traffic  
Services, 2006–2007 to 2010–2011  
(Total Number of Operational Days)*

***Aids to Navigation***

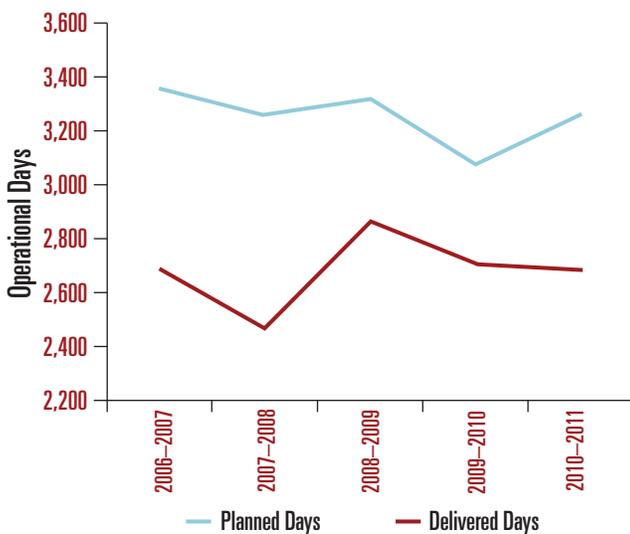
Coast Guard's Aids to Navigation program helps reduce the marine navigation risks faced by industry and pleasure craft alike by providing support to some 17,000 marine aids. These include short-range aids such as visual aids (lighthouses and buoys), audible aids (fog horns), radar aids (reflectors and beacons) and long-range aids such as the Differential Global Positioning System.

Fleet supports this program by providing vessels and crews to place, lift, check and maintain an extensive system of floating and fixed navigation aids, both on-water and shore-based, and by carrying out surveying operations. A variety of large and small multi-taskable and specialized vessels maintain this network. Some aids are required year-round, while seasonal aids are lifted out of the water for the winter season to prevent ice damage. Seagoing personnel also deploy, recover and maintain aids, verify the position and operation of floating aids, keep records of operation, and update positions and characteristics of aids as required.

In 2010–2011, although 3,262 days were planned for dedication to Aids to Navigation, only 2,683 days were actually delivered in support of the program. Because of other government priorities such as reassignment to Search and Rescue, the Aids to Navigation program received less time than originally planned in the Integrated Fleet Operations Plan.

**Graph 10:**

*Service to Aids to Navigation, 2006–2007 to 2010–2011 (Total Number of Operational Days)*



CCG employees performing buoy work

Having said that, all of the Aids to Navigation-related jobs were completed, not taking into consideration the program’s targeted timeframes. As Graph 10 shows, the service is consistent with the actual versus planned service delivery for the past five years.

**Icebreaking**

Fleet’s icebreakers are powerful vessels capable of performing in heavily frozen waters. Icebreaking services in Canada are crucial to the marine industry and the economy as a whole, ensuring the safe passage of goods and people through icy waters. Fleet responds to approximately 1,500 requests a year for icebreaking support, mainly to aid commercial vessels in conducting their trade. Working in partnership with Environment Canada’s Canadian Ice Services, the program, administered by Maritime Services and Fleet,



CCGS *Amundsen*, Medium Icebreaker, in the Arctic

provides for the safe and timely movement of maritime traffic in Canada's waters by:

- freeing trapped vessels and escorting ships in ice;
- maintaining open tracks through ice firmly attached to the shore;
- resupplying isolated northern settlements;
- providing ice information and ice routing information to assist vessels navigating through or around ice-covered waters;
- conducting harbour breakouts; and
- reducing the risk of flooding on the St. Lawrence Seaway and other inland waterways by monitoring, preventing and breaking up ice jams.

Icebreakers also carry Coast Guard helicopters that conduct ice reconnaissance flights. It is these reconnaissance flights that locate open water and guide the vessel for more efficient, effective and economical icebreaking.

#### *Arctic and Southern Icebreaking*

Icebreakers are on duty year-round through Canada's two icebreaking seasons: December to

April in the south from the Great Lakes to the coast of Newfoundland and Labrador, and June to November in the Arctic. After completing winter season operations in May or June, six icebreakers are deployed from the southern regions to the Arctic for the summer season. Of note is that one of these vessels, *CCGS Amundsen*, is fully dedicated to Arctic Science.

Year over year, DFO ice reports have noted that Canadian winters are becoming milder, with a downward trend in the amount of multi-year ice in the Arctic region. As a consequence, less ice is



CCGS *Sipi Muin* and CCGS *Mamilossa*, Air Cushion Vehicles

forming on the Great Lakes, the St. Lawrence Seaway and Gulf and around the east coast. This also contributes to later freezing of Arctic waters in the fall and earlier thawing in the spring/summer, so Fleet vessels spend more time in the Arctic.

The Government of Canada's Northern Strategy is another contributing factor for the increasing number of days spent on Arctic icebreaking. More vessels are deployed in the Arctic to support scientific research, map the Arctic seabed, escort commercial vessels through ice and bolster Canada's sovereignty over the Arctic by providing a federal presence.

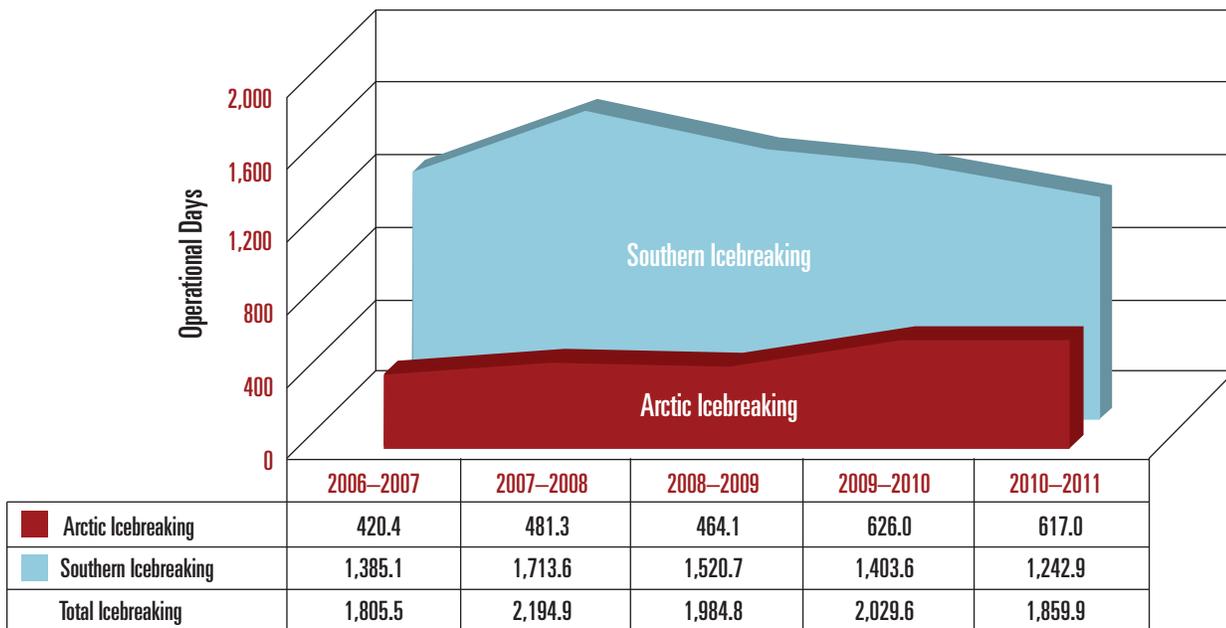
Graph 11 clearly illustrates this phenomenon. As can be seen, the number of days spent on southern icebreaking has been on a downward trend for the past four years, while Arctic icebreaking has been slowly increasing in each of the past five years.

## Other Internal Clients

As the owner, manager and operator of Canada's only civilian fleet, Coast Guard plays a crucial role in supporting the DFO mandate. The fleet is equipped with a variety of multi-taskable and specialized vessels dedicated to the delivery of the on-water programs of the Ecosystems and Oceans Science as well as the Ecosystems and Fisheries Management sectors. In order to achieve the highest possible level of service and efficient use of resources, service level agreements have been negotiated between Fleet and these DFO sectors, clearly stating the obligations and expectations of both parties. Due, in large part, to the fact that Fleet is not provided with the annual funding to support DFO client requirements, all services provided to Ecosystems and Fisheries Management as well as Ecosystems and Oceans Science sectors are done on a cost-recovery basis.

### Graph 11:

*Service to Southern and Arctic Icebreaking, 2006–2007 to 2010–2011  
(Total Number of Operational Days)*





Science in the North

### *Ecosystems and Oceans Science*

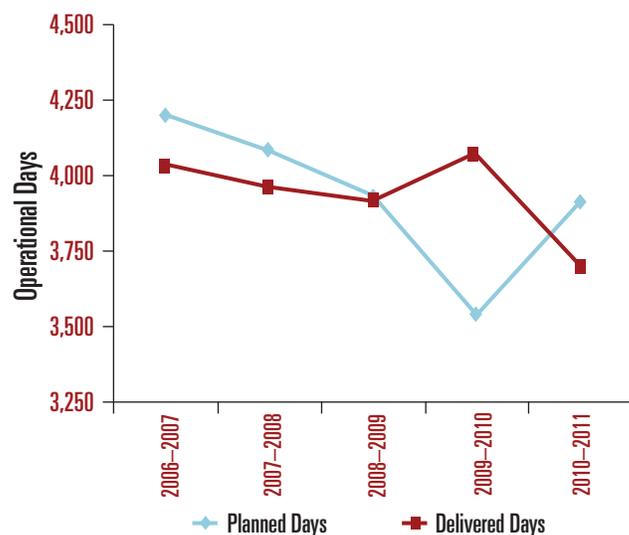
Scientists conducting hydrographic, oceanographic and scientific research are hosted aboard Fleet's vessels and are supported in their work by specialized crews. While science-related activities are conducted on many of Fleet's multi-taskable vessels, 17 vessels in the fleet are solely dedicated to the scientific endeavours of DFO and other public institutions and organizations. Vessels used for scientific missions include research trawlers, fishing vessels, hydrographic survey vessels, oceanographic vessels and icebreakers.

Since 2006–2007, the number of planned operational days allocated to Ecosystems and Oceans Science clients has decreased; however, there was a significant increase in the 2010–2011 planned days. Overall, 95 percent of the services planned were delivered in support of Ecosystems and Oceans Science. The primary reasons for this 5-percent underdelivery were vessel breakdowns, weather delays and changes in client priorities. Graph 12 below shows the five-year trend for

services delivered versus services planned for Ecosystems and Oceans Science.

### **Graph 12:**

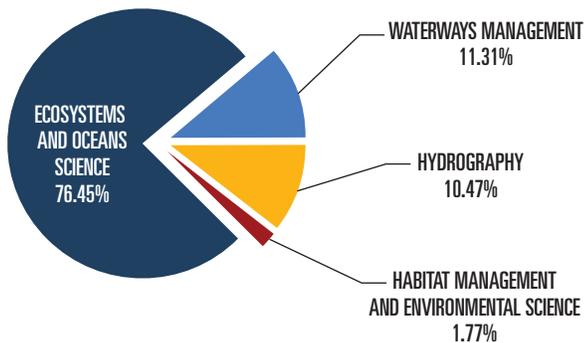
*Service to Ecosystems and Oceans Science, 2006–2007 to 2010–2011*  
(Total Number of Operational Days)



As evidenced by Graph 13, the majority of service days delivered to Ecosystems and Oceans Science were in support of scientific research (76.45 percent), followed by Waterways Management (11.31 percent), Hydrography (10.47 percent) and Habitat Management and Environmental Science (1.77 percent).

**Graph 13:**

*Service to Ecosystems and Oceans Science by Activity, 2010–2011*  
(% of Total Operational Days)



***Ecosystems and Fisheries Management***

In collaboration with Conservation and Protection officers, Fleet supports the Ecosystems and Fisheries Management sector by carrying out enforcement and surveillance activities in Canadian waters for the Conservation and Protection program. Fleet also provides an enhanced presence at sea in the regulatory areas of the Northwest Atlantic Fisheries Organization in order to help stop illegal fishing by foreign fleets in the 282,500 square kilometres of jurisdictional waters off the Grand Banks of Newfoundland and in international waters.

Fisheries patrol vessels are used in near-shore and offshore fisheries ocean patrols in Canada. Multi-taskable vessels and helicopters are also provided by Fleet, as required. Fleet seagoing personnel support DFO officers in performing enforcement duties that help ensure compliance with Canadian law in Canadian jurisdictions. These duties include:

- monitoring and patrolling vast areas of coastline and providing a federal presence in Canadian waters, thereby deterring threats and illegal activities;
- patrolling closed and boundary areas and conducting inspections at sea;
- serving as a command platform and secure communication hub for Conservation and Protection enforcement activities;
- conducting general and covert surveillance and monitoring of various fisheries;
- recovering, seizing, storing and transporting illegal fishing gear; and
- checking licences, logbooks, catch and fishing gear including inspection of fixed and mobile gear types, and disclosure of poaching and/or other means of illegal fishing.

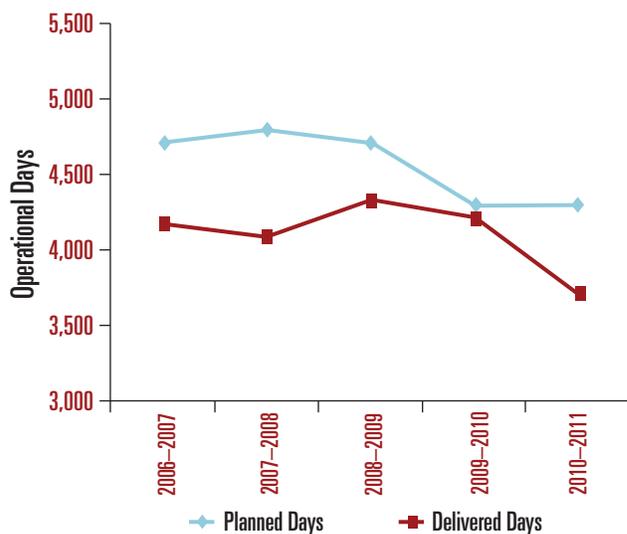


CCGS Louis M. Lauzier, Mid-Shore Patrol Vessel

As displayed by Graph 14, services delivered to Ecosystems and Fisheries Management decreased slightly in 2010–2011 relative to service in previous years. This could be due to multiple factors including lack of vessel availability and federal government fiscal restraint.

### Graph 14:

*Service to Ecosystems and Fisheries Management, 2006–2007 to 2010–2011 (Total Number of Operational Days)*



Overall, Fleet delivered 86 percent of the total planned number of operational days for Ecosystems and Fisheries Management in 2010–2011. Table 1 illustrates the distribution of these services, showing that approximately 90 percent of delivered time was spent patrolling either Canadian waters or Northwest Atlantic Fisheries Organization regulatory areas. Overall, while services delivered for Ecosystems and Fisheries Management activities in 2010–2011 decreased slightly from the 2009–2010 level, operational days for Northwest Atlantic Fisheries Organization patrols saw a marginal increase of three percentage points.

### Other Government Departments

In addition to its Coast Guard/DFO mandate, Fleet is responsible for providing on-water resources (vessels, helicopters, expertise, personnel and infrastructure) for the operations and specific maritime priorities of other government departments and agencies. Among these organizations are the Natural Sciences and Engineering Research Council of Canada, Environment Canada, Public Safety Canada, Natural Resources Canada, the Department of

**Table 1:**

*Ecosystems and Fisheries Management Activities, 2010–2011*

Activity	Number of Operational Days	Percentage of Total Operational Days
Patrols in Canadian waters	2,117.21	57.41%
Northwest Atlantic Fisheries Organization patrols	1,210.67	32.83%
Resource management	180.08	4.88%
Other patrols	138.07	3.74%
Administrative	37.78	1.02%
Patrols in international waters*	4.32	0.12%
Aboriginal fisheries	0.00	0.00%
<b>Total</b>	<b>3,688.13</b>	<b>100.00%</b>

\*Patrols off the Pacific and east coasts (excluding Northwest Atlantic Fisheries Organization areas).

National Defence, Foreign Affairs and International Trade Canada, and Transport Canada.

### *Maritime Security Enforcement Teams*

Under the *Oceans Act*, the Canadian Coast Guard's mandate to support other government departments and agencies has resulted in the creation of partnerships with Canada's wide variety of law enforcement agencies for a multitude of reasons, including maritime security. As national and international awareness of the maritime security domain has come closer to the front lines of global security awareness, it has become necessary for the Coast Guard Fleet to evolve in its activities and programs in order to provide the necessary support to its partner agencies. As such, Coast Guard has received dedicated national security funding to assist Fleet in delivering specific maritime security activities.



CCGS *Cape Hurd*, Specialty vessel  
(Maritime Security Enforcement Team Program)

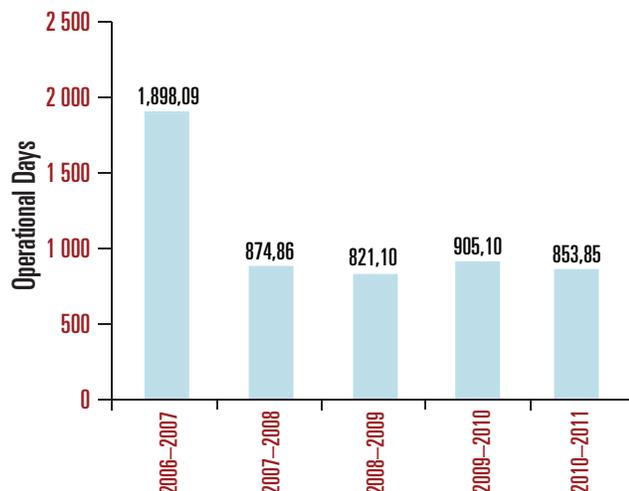
A key aspect of Fleet's increased role in supporting the federal maritime security agenda is its involvement in the joint Royal Canadian Mounted Police/Coast Guard Maritime Security Enforcement Team program. This program dedicates four Coast Guard vessels to

enforcement patrols on the St. Lawrence River and the Great Lakes system. Coast Guard crew and Royal Canadian Mounted Police personnel work closely together to investigate potential criminal activities, ensure border integrity, and in general carry out the delegated duties of a peace officer of Canada. Work of this nature exposes Fleet personnel to risks and hazards not usually experienced in other Coast Guard programs. To mitigate these risks, Fleet personnel assigned to Maritime Security Enforcement Team vessels receive additional personal protective equipment, law enforcement familiarization training and police defensive tactics training.

In 2010–2011, 936 days were planned in support of the Maritime Security Enforcement Team program, while 854 days were delivered. This represents a delivery rate of 91.2 percent, a slight increase relative to the 2009–2010 level. As shown in Graph 15, time delivered to this program has been fairly consistent over recent years (except fiscal year 2006–2007) at around

### **Graph 15:**

*Service to Maritime Security Enforcement Teams, 2006–2007 to 2010–2011*  
(Total Number of Operational Days)



850 days per year. With the delivery of four new Mid-Shore Patrol vessels over the next four years to replace the existing vessels currently assigned to the Maritime Security Enforcement Team program, it can be reasonably expected that the increased capabilities of the new vessels will enable Fleet to increase the number of planned operational days dedicated to the program.

Table 2 displays the details of the support provided by Fleet to the Maritime Security Enforcement Team program.

### *Additional Government Departmental Programming*

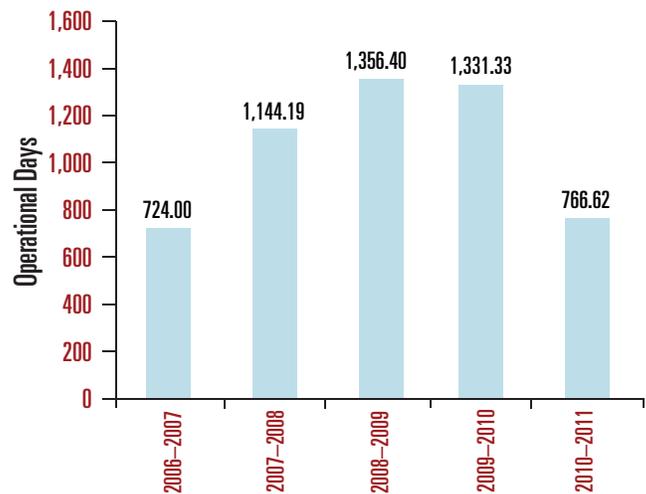
As a very high-profile program in the federal government's agenda, the Maritime Security Enforcement Team program constitutes over 50 percent of all services delivered to other government departments. However, Fleet provides a significant amount of vessel days to other government departments and agencies each year.

The following chart displays the number of operational days spent in support of all government department programs other than the Maritime Security Enforcement Teams. As

illustrated, the number of dedicated days varied significantly over the past five years. For 2010–2011, this can be attributed to the fact that some special projects requiring dedicated vessel time were completed the previous fiscal year plus there was a slight decrease in Government of Canada demand for Fleet services.

### **Graph 16:**

*Service to Other Government Departments and Agencies, 2006–2007 to 2010–2011  
(Total Number of Operational Days)*



**Table 2:**

*Maritime Security Enforcement Team Program Activities, 2010–2011*

Activity	Number of Operational Days
Maritime Security assistance activities	457.01
Vessel readiness	323.22
Other (e.g., inspection, transit)	44.20
General support activities	15.03
Coast Guard delays	2.61
Client delays	6.01
Preparedness training and exercises	2.82
Awaiting daylight and weather delays	2.95
<b>Total</b>	<b>853.85</b>

## Other Events or Federal Government Initiatives — Highlights of 2010–2011

As part of its day-to-day activities, Fleet is required to respond to, support or participate in many types of events. In 2010–2011, Fleet was called upon to host the 2010 North Pacific Coast Guard Forum, to help intercept a ship carrying refugee claimants and to rescue the passengers of the grounded cruise ship *MV Clipper Adventurer*. Additionally, the officers and crew of *CCGS Leonard J. Cowley* were honoured for the rescue of 22 members of the Spanish fishing vessel *FV Monte Galineiro*.

### *North Pacific Coast Guard Forum*

The North Pacific Coast Guard Forum was established in 2000 by the coast guards of Japan, South Korea, Russia and the United States as a venue to foster multilateral cooperation by sharing information and establishing best practices in the North Pacific Ocean. Canada joined the North Pacific Coast Guard Forum in 2001 at the request of Japan and the United States. China joined the forum in 2001 as an observer and became a member in 2004. Coast Guard leads a multi-departmental Canadian team at the North Pacific Coast Guard Forum, which includes the Canada Border Services Agency, Fisheries and Oceans Canada, the Royal Canadian Mounted Police and Transport Canada.

Fleet, Pacific region, continues to be actively involved in the North Pacific Coast Guard Forum, which brings together the operational arms of coast guards and marine border services agencies of its member states. The Regional Director, Fleet, Pacific region, is the Canadian delegate to the combined operations working group, which actively plans and conducts international interagency operations and training exercises. In 2010–2011, Canada hosted both



North Pacific Coast Guard Forum

the North Pacific Coast Guard Forum experts working meeting and summit meetings, where the heads of each nation's agencies met and approved the following year's plan.

### *Role of Fleet in the Interception of the MV Sun Sea Carrying Refugee Claimants in the Pacific Region*

This multi-agency interdiction occurred off the coast of Vancouver Island in August 2010, and saw the successful boarding and detainment of the migrant ship *MV Sun Sea*, which was carrying approximately 500 individuals seeking refugee status in Canada. Fleet personnel in the Pacific region were involved in the preparation and planning for the arrival of the vessel, and were integral in the operations centre that directed the multi-agency operation. This action highlighted Fleet's role as Canada's civilian fleet, providing support to national and international agencies in a host of activities on Canadian waters. For their efforts, three Fleet employees will receive the Operational Ribbon from United States Coast Guard Commander, Pacific.

### *Grounding of the Vessel MV Clipper Adventurer*

After the cruise ship *MV Clipper Adventurer* was driven hard aground on a shoal in the Coronation Gulf located between Victoria Island and mainland Nunavut in the summer of 2010, Coast Guard crews took quick action to ensure that all 128 passengers were safely evacuated from the disabled ship, and helped to protect the fragile Arctic environment from the risk of any potential discharge from the 280 tonnes of fuel onboard the disabled ship.

As is the case in all such instances, the ship owner remains responsible for the vessel's salvage plans, but the crew of *CCGS Sir Wilfrid Laurier* also swung into action monitoring and ensuring the safety of the entire salvage operation. With the aid of Canadian Hydrographic Service teams from DFO onboard *CCGS Sir Wilfrid Laurier*, surveys were made around the *MV Clipper Adventurer* to ensure the area was safe for navigation for the four commercial tug boats participating in the salvage operation. A potential environmental incident was avoided and the pristine Arctic landscape remained undisturbed because of the hard work of Coast Guard crews, contractors, cruise ship crew members, Transport Canada and Transportation Safety Board inspectors, and the Canadian Hydrographic Service survey team aboard *CCGS Sir Wilfrid Laurier*.

### *Coast Guard, Fleet Rescue of Crew of the FV Monte Galineiro (Fleet Employees Honoured)*

In the summer of 2010, the officers and crew of *CCGS Leonard J. Cowley* received the J. J. Kinley award from the Coast Guard Assistant Commissioner, Newfoundland and Labrador region, John Butler, and Regional Director, Fleet, Stephen Decker. The award was presented



Officers and crew of *CCGS Leonard J. Cowley* received the J. J. Kinley Award. Pictured are CCG Assistant Commissioner, John Butler; Commanding Officer, Jim Chmiel; and Regional Director of Fleet, Stephen Decker.

in recognition of their outstanding efforts and success in rescuing all 22 members of the Spanish fishing vessel *FV Monte Galineiro* under challenging conditions after it sank suddenly into the frigid Atlantic in February 2009.

This award, named after the Honourable John James Kinley, a former lieutenant governor of Nova Scotia and former national president of the Navy League, is presented annually. It recognizes employees or units of Coast Guard, DFO or the Canadian Forces who have made remarkable contributions in support of naval and maritime interests.

### *Arctic Events and Initiatives*

With 40 percent of its territorial landmass located above the Arctic Circle — including 162,000 kilometres of Arctic coastline constituting a full 25 percent of the global Arctic — Canada is undeniably an Arctic nation. The Government of Canada is firmly exercising sovereignty over its Arctic lands and waters, sovereignty that is long-standing and well established, and based on historic title, international law and the presence of Inuit and other Aboriginal peoples for thousands of years.



CCGS *Des Groseilliers*, Medium Icebreaker

At the same time, international interest in the Arctic region is growing. As a result, Canada is demonstrating effective stewardship and leadership internationally by promoting a stable, rules-based management framework for the Arctic region, where the rights of sovereign states are respected in accordance with international law and diplomacy.

Canada has long been working with its international Arctic neighbours in areas such as search and rescue, icebreaking, fish and wildlife conservation, transportation, research, energy and the environment. The Government of Canada will continue to strengthen this cooperation, while advancing its priorities for the Arctic region.

### ***2010 Arctic Survey***

Since 2008, the United Nations Convention on the Law of the Sea program has been carried out through a collaborative effort between the governments of Canada and the United States. The intent is to use the capability of two heavy icebreakers, working together, to operate in the

most extreme and remote Arctic conditions. *CCGS Louis S. St-Laurent* and the United States Coast Guard Cutter *Healy* began joint seismic operations on August 10, 2010. Until September 3, the vessels alternated ice escort duties so that the *Louis* could conduct seismic operations and the *Healy* could conduct a multi-beam bathymetric survey. Canada and the United States plan to continue this work in 2011.



CCGS *Louis S. St-Laurent*, Heavy Icebreaker

Under the United Nations Convention on the Law of the Sea, Canada has until 2013 to prepare a submission to the United Nations Commission on the Limits of the Continental Shelf to delineate the outer limits of its extended continental shelf beyond 200 nautical miles from shore. This will determine with precision the limits to where it can exercise its sovereign rights over the natural resources of the seabed and subsoil. Foreign Affairs and International Trade Canada is responsible for preparing the submission. The National Research Council of Canada's Geological Survey of Canada and DFO's Canadian Hydrographic Service are responsible for the scientific work needed for the submission.

### Canadian Coast Guard Auxiliary

Fleet relies on the support provided by the Canadian Coast Guard Auxiliary in order to respond to search and rescue cases in areas that cannot be reached by the Coast Guard fleet.

The auxiliary is made up of close to 5,000 dedicated volunteers and over 1,500 vessels with a combined asset value of \$215 million. The members are primarily pleasure craft operators and commercial fishermen who use their community-owned vessels or vessels loaned by Coast Guard to the auxiliary for safe boating education and search and rescue-related activities.

All vessels must meet strict standards in order to become part of the auxiliary fleet. Members are responsible for keeping their boats maintained and equipping them with specialized search and rescue gear, which can run into the thousands of dollars.

### Helicopters

The Coast Guard Fleet consists of 22 helicopters that support Coast Guard government-wide, mission-critical program responsibilities including Marine Navigation Services, Marine Communications and Traffic Services, Icebreaking, Environmental Response, and Search and Rescue. For the majority of the fiscal year, the fleet consisted of 23 helicopters until one of them was disposed of.

Much of the equipment that Coast Guard technological services must maintain is located on remote Canadian shorelines or on islands accessible only by helicopters or helicopter/ship combinations. Given the length and ruggedness of Canada's coastline, helicopters are the most efficient method of accessing remote sites, as they burn less fuel and take less time than surface vessels.

Coast Guard helicopter operations are driven by the need to:

- transport personnel and supplies to locations that are otherwise inaccessible or that are very difficult and time consuming to access;
- get to them quickly so critical services are maintained round the clock;
- ensure the safety of personnel and the public, both while they are in transit and at the location; and
- do all the above at reasonable cost and with minimum resources.

### Service Level Agreements to Deliver Departmental Programs

Based on recommendations from the Report of the Auditor General in May 2008, Fleet committed to create service level agreements that would clearly identify the roles and obligations of Fleet and its clients, while increasing transparency and accountability.



CCG Helicopter (MBB BO-105) preparing to land on a Coast Guard vessel

Fleet completed service level agreements with its two DFO clients (Ecosystems and Oceans Science, and Ecosystems and Fisheries Management) in April 2009. By having these agreements in place to serve as a frame of reference, Fleet has been able to improve its ability to monitor, adjust and report on its performance with respect to services provided to these clients.

Another agreement has been created to highlight the responsibilities of Fleet and Maritime Services on the delivery of Coast Guard programs. It is expected that the new service level agreement will be implemented in 2011–2012.

## 3 Fleet Human Resources

Demographic shifts continue to be the biggest single risk to Coast Guard's workforce as increasing numbers of experienced employees become eligible for retirement and the Canadian population continues to become more diverse.

### SEAGOING PERSONNEL

Coast Guard has identified ships' crew and ships' officers as members of groups essential to operations. These two groups comprise the overwhelming majority of Fleet Operational

Readiness program staff. Recruitment measures specific to each group are being implemented.

Shipboard occupations and the related operational environment experienced by mariners are quite distinct from those encountered by Coast Guard's shore-based personnel. Ships remain at sea for extended periods of time; the work is demanding and often performed under difficult physical conditions. The work is not only physically challenging, but also occasionally risky. Ships' crews and officers must be well trained and

**Table 3:**

*Distribution of Seagoing Personnel by Region and Employment Type, April 1, 2010*

	Newfoundland and Labrador	Maritimes	Central and Arctic	Québec	Pacific	Nationally
<i>Ships' officers</i>						
On strength (full-time equivalent)	217	214	100	158	167	856
On strength (term)	3	6	8	6	16	39
Total ships' officers on strength	220	220	108	164	183	895
<i>Ships' crew</i>						
On strength (full-time equivalent)	356	298	124	194	249	1,221
On strength (term)	61	56	41	48	99	305
Total ships' crew on strength	417	354	165	242	348	1,526

**Table 3: (Continued)***Distribution of Seagoing Personnel by Region and Employment Type, April 1, 2010*

	Newfoundland and Labrador	Maritimes	Central and Arctic	Québec	Pacific	Nationally
<i>Hovercraft pilots, navigators, engineers and crew</i>						
On strength (full-time equivalent)	–	–	–	16	41	57
On strength (term)	–	–	–	2	5	7
Total specialized personnel on strength	–	–	–	18	46	64
<b>Total</b>	<b>637</b>	<b>574</b>	<b>273</b>	<b>424</b>	<b>577</b>	<b>2,485</b>

experienced in order to successfully perform their work. To this end, Fleet must not only recruit and retain qualified personnel at pace with attrition, but also ensure that individuals maintain necessary levels of certification to carry out the highly specialized work inherent to key positions aboard vessels.

In order to mitigate this certification risk, one strategy elaborated on in last year's Strategic Human Resources Plan is to tap into a previously overlooked source of mid-range engineering certificates by developing individual training requirements for qualified ship's crew who possess a fourth-class motor certificate so that they are able to attain a third-class motor certificate.

The ships' crew certification program has established training modules to assist ships' crew in obtaining their third-class certificates in a one-to two-year timeframe. This strategy will provide the flexibility we need to bring in mid-range certificates while providing career progression for our ship's crew personnel.



CCG employees preparing for on-water operations

**Table 4:**  
*Distribution of Seagoing Personnel by Region and Age, April 1, 2010*

Age Category	Newfoundland and Labrador	Maritimes	Central and Arctic	Québec	Pacific	Nationally
<i>Ships' officers</i>						
Average age (full-time equivalent)	45	48	44	45	45	45
Age under 45 years	85	51	46	69	73	326
Age 45–54 years	110	117	48	75	71	421
Age 55–59 years	16	33	11	17	24	101
Age 60 years or more	9	19	3	3	15	49
Total ships' officers on strength	220	220	108	164	183	895
<i>Ships' crew</i>						
Average age (full-time equivalent)	46	50	43	48	42	46
Age under 45 years	158	62	74	74	175	543
Age 45–54 years	168	197	67	110	115	657
Age 55–59 years	59	66	21	44	40	230
Age 60 years or more	32	29	3	14	18	96
Total ships' crew on strength	417	354	165	242	348	1,526

**Table 4 (Continued):***Distribution of Seagoing Personnel by Region and Age, April 1, 2010*

Age Category	Newfoundland and Labrador	Maritimes	Central and Arctic	Québec	Pacific	Nationally
<i>Hovercraft pilots, navigators, engineers and crew</i>						
Average age (full-time equivalent)	–	–	–	47	38	43
Age under 45 years	–	–	–	3	33	36
Age 45–54 years	–	–	–	12	12	24
Age 55–59 years	–	–	–	3	1	4
Age 60 years or more	–	–	–	0	0	0
Total specialized personnel on strength	–	–	–	18	46	64

## FLEET SAFETY AND SECURITY

Fleet is committed to safety and security, environmental protection and quality of services it provides to its clients. Throughout 2010–2011, in an effort to ensure continuous improvement and to focus on its safety and security mandate, Fleet developed a safety and security management and regulatory system framework paper, and completed both its ship security officer training and its Sea Island diving operational and training program certification. Additionally, Fleet implemented an interregional audit process, conducted external audit contract renewal, and developed and presented Fleet’s internal audit course leading to an increase in the number of auditors.

### Reported Incidents

In 2010–2011, Fleet saw a decrease in the number of disabling injuries for a total of

158 reported incidents. A disabling injury is an injury that prevents an employee from reporting to work on a day following an injury, results in loss of a body part (or the usefulness of that body part) or results in the impairment of a bodily function of an employee.

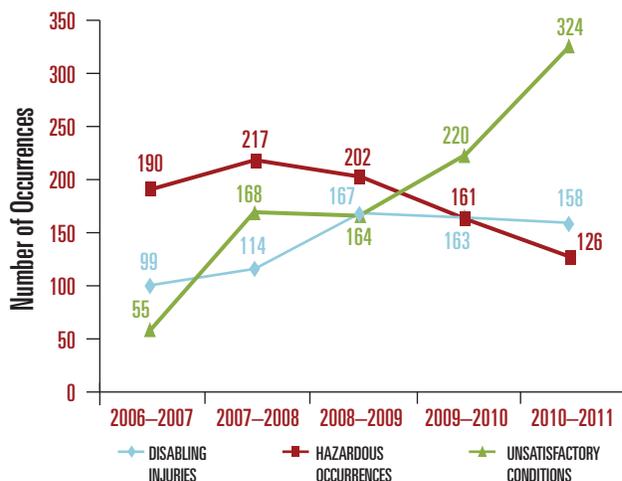
Hazardous occurrences continued to decline to their lowest point since 2004–2005 with 126 reported incidents. A hazardous occurrence is an accident/illness or a near miss arising out of, linked with or occurring during the course of employment that results in or has the potential to result in personal injury or damage to property or equipment or in pollution to the marine environment.

Unsatisfactory conditions increased by 47 percent to 324 reported incidents. An unsatisfactory condition includes technical problems, breakdowns or deficiencies with systems or equipment that do not meet the definition of a hazardous

occurrence but may affect the safe operation of the machinery or the safe/efficient delivery of the program.

### Graph 17:

*Trend of Reported Incidents, 2006–2007 to 2010–2011*



## EMPLOYMENT EQUITY WITHIN FLEET

Coast Guard recognizes that recruitment is an opportunity to create a workforce that is more representative of the Canadian population. Employment equity is also an opportunity to draw from previously untapped talent pools in order to help sustain the continued effective operations of the fleet. The 2008–2011 DFO Employment Equity Management Action Plan is the Fleet Operational Readiness program's guide to achieving a representative workforce. It identifies employment equity gaps, potential barriers to reducing gaps, and actions to take to address these barriers.



Environmental Response Services Program Exercise

The Fleet Operational Readiness program has eliminated barriers for employment equity candidates vying for seagoing positions, including removal of the second language prerequisite for officer training program candidates. Designated group members at sea are portrayed in Coast Guard promotional materials. A six-month dispensation for all indeterminate employees to attain marine emergency duty certification is being offered, thus encouraging them to pursue careers at sea. The Fleet Operational Readiness program has also created the Operational Women's Network to provide a communication forum for seagoing women.

### Performance

While seafaring has been predominantly a male career, further effort has been placed on recruiting more women into seagoing positions. Table 5 shows Coast Guard's seagoing demographics as of April 1, 2010.

**Table 5:***Seagoing Personnel Demographics, April 1, 2010*

Occupational Group	Seagoing Employees		Women		Men	
	Number	Average Age	Number	Average Age	Number	Average Age
Ships' crew	1,526	46	166	41	1,360	47
Ships' officers	895	46	68	37	827	46

**Operational Women's Network**

The Operational Women's Network is a voluntary information and communication tool for the women of Fleet who face the challenges of working in a non-traditional role. The network

also provides secondary benefits to recruitment and encouragement to the seagoing women. The goal for 2011–2012 is to address the technological issues that currently exist in order to complete the full implementation of the project.

## 4 Fleet Financial Framework

The Fleet Financial Framework serves as the basis of the Integrated Fleet Operations Plan by providing the direction, tools, themes and inputs for its creation. It provides:

- clear roles and responsibilities to those involved;
- the foundational policies, guidelines and directives needed for the creation of the plan;
- financial planning and review procedures as well as reporting requirements to ensure compliance with government financial policy; and

- a record of Fleet executive board decisions related to the plan.

The goal of the Fleet Financial Framework is to ensure the Integrated Fleet Operations Plan is nationally relevant, accountable, transparent and affordable within Fleet's current financial position.

### NOTIONAL BUDGET

Table 6 contains notional budget numbers for Fleet operations at sea for 2010–2011.



CCGS *Samuel Risley*, Medium Endurance Multitasked Vessel, in ice

**Table 6:**

*Notional Budget, Ship Operations, 2010–2011 (Dollars)*

Salary	Operations and Management	Fuel	Total
149,367,088	30,056,271	40,100,001	219,523,360

## FLEET AFFORDABILITY PLAN

The Fleet Affordability Plan includes financial and operational risks as well as targeted risk management strategies. It also includes notional funding levels for the program, a listing of client requirements, current Fleet affordability measures and Fleet Executive Board-approved non-standard items and recommendations to the Coast Guard Management Board.

The Fleet Affordability Plan provides a national view of the services that the Fleet Operational Readiness program can provide in a given fiscal year, while maintaining overall affordability and accountability to the governance model and transparency to Fleet clients.

## INTEGRATED FLEET OPERATIONS PLAN

The Integrated Fleet Operations Plan is an annually published document that represents an important milestone in Fleet’s operational and financial planning process. It involves consultations with Fleet clients, both internal and external to DFO, in order to determine their need for Coast Guard vessel and helicopter support in the execution of their programs at sea. It also requires many inputs such as business plans, financial budget allocations, service level agreements or memoranda of understanding, client level-of-service expectations, priority-setting exercises and integrated investment plans.

## Fuel

Managing fuel expenditures is a challenging task for the Fleet Operational Readiness program. Planned fuel consumption by Coast Guard vessels is approximately 60–65 million litres of fuel each year. Considerable volatility in fuel expenditures exists due to both price volatility and vessel programming (i.e., icebreaking activity is dependent on weather conditions). To improve the management of fuel expenditures, a controlled financial allotment for fuel expenditures has been created under the Fleet Operational Readiness program financial management system.



CCG Helicopter (MBB BO-105)  
Photo: National Photo Library

The creation of a controlled financial allotment for fuel expenditures provides Coast Guard with the support and corroborating evidence needed when discussing actual fuel usage and

essential funding requirements with the department and central agencies. This controlled allotment is supported by a process that provides for regular monitoring and reporting of consumption and expenditures by the regions to national headquarters on a monthly basis.

This allotment, controlled at headquarters by the Director General, Fleet, is used to provide each region with a prorated portion of the Fleet Operational Readiness fuel budget, based on regional requirements to support the Fleet Operational Readiness program. The expenditure controls placed on the allotment specify that the funding can be used only for the purchase of ships' fuel. In the rare case where a regional account is forecasted to end the year in a surplus position, the funding will either be redistributed by the Director General, Fleet to regions requiring additional fuel funding in the current fiscal year, or be returned to the Commissioner, Coast Guard's control account. It cannot be used by regions, at the regional level, to fund financial pressures.

The controlled nature of the allotment has provided the Fleet Operational Readiness program with direct benefits. For example, when there are severe pressures on the Coast Guard's fuel budget, the stringent validation and consistent monitoring of the fuel allotment can be used to demonstrate the need for additional in-year funding for fuel from the Commissioner, Coast Guard, the Deputy Minister, DFO, or Treasury Board.

### *Federal Excise Tax Relief Rebate*

On March 17, 2010, a retroactive regulatory amendment to the Ships' Stores Regulations was published in the *Canada Gazette*, Part II allowing Coast Guard to request a federal excise tax rebate for fuel consumed outside Canadian waters as of April 1, 2008. In response to this regulatory change, Coast Guard requested and received a federal excise tax rebate of approximately \$405,000 for 2009–2010.

In an effort to ensure national consistency in the reporting of fuel consumed outside Canadian territorial waters (i.e., beyond the twelve nautical mile limit), Fleet Circular 07-2010 Federal Excise Tax Relief, published July 16, 2010, was provided to ships' officers and ships' crews explaining the regulatory requirements, directives and procedures of the amendment of Ships' Stores Regulations (SOR/96-40).

Currently, Coast Guard expects to receive approximately \$400,000 a year of re-spendable funds that will become part of Fleet's official fuel forecast and will form part of the approach to drive the fuel budget to a zero balance in each successive fiscal year.

# 5 Fleet Renewal

## OUR ASSETS

Fleet is responsible for the provision of safe, reliable and operational ships, air cushion vehicles and helicopters with competent, professional crews to respond to the on-water requirements of Coast Guard and DFO as well as other government departments and agencies. In order to maintain the capacity to provide service 24 hours per day, 365 days a year, as of March 31, 2011 the fleet was composed of

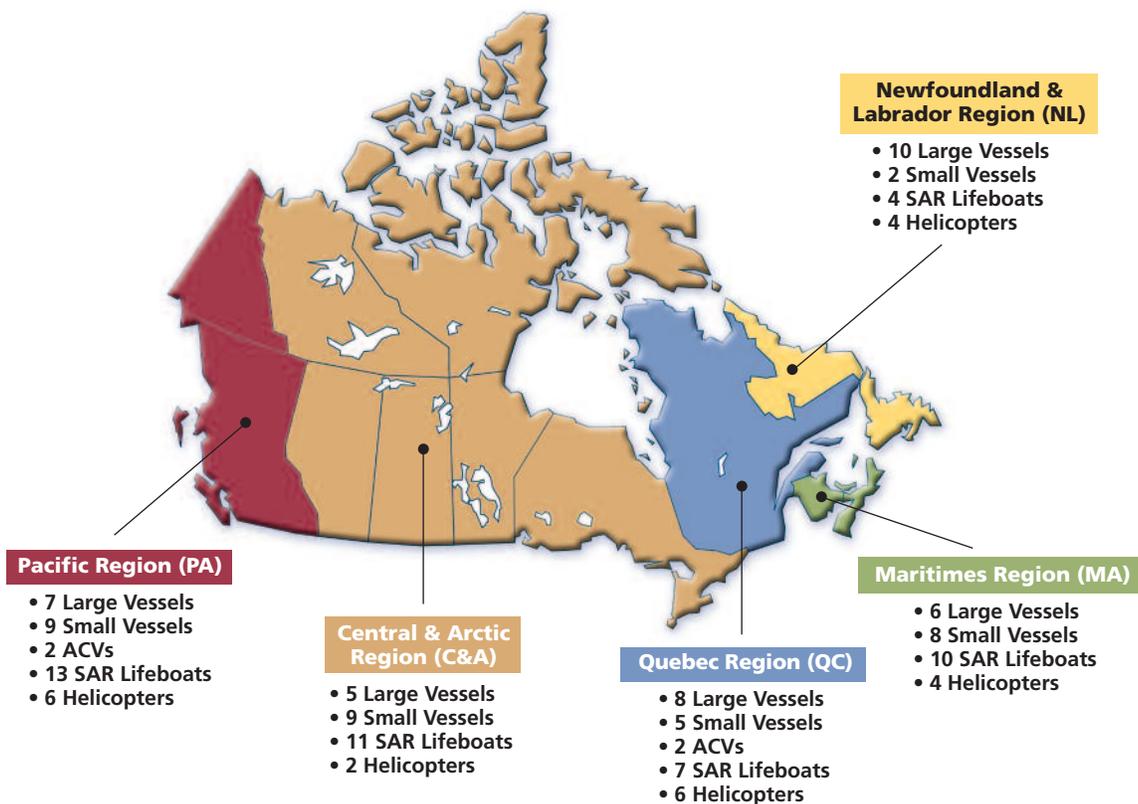
118 vessels, including four air cushion vehicles, and 22 helicopters.

## New Acquisitions

The Government of Canada and the Coast Guard are committed to renewing the fleet. Through the Coast Guard Investment Plan, the Fleet Investment Plan and the Economic Action Plan, Fleet has replaced a number of vessels over the past few years. During 2010–2011, Fleet

**Figure 2:**

*Distribution of Vessels by Region, as of March 31, 2011*



acquired two new vessels, and one helicopter, a Bell 212, which was registered to Coast Guard on March 30, 2010 but only came into service on June 16, 2010.

### New Vessels in 2010–2011

#### *CCGS Viola M. Davidson*

*CCGS Viola M. Davidson* is an aluminum Coast Guard specialty vessel that was constructed along with the twin vessel, *CCGS Kelso*, for Fisheries Research by ABCO Industries Limited of Lunenburg, Nova Scotia. Launched on March 3, 2010, *CCGS Viola M. Davidson* was dedicated on September 23, 2010 and entered service with the Saint Andrews Biological Station on the shore of Passamaquoddy Bay in New Brunswick. Built to replace *Pandalus III* at Saint Andrews Biological Station, *CCGS Viola M. Davidson* has enabled Fleet to support scientific work in coastal areas and up to the middle of the Bay of Fundy every day of the year.



*CCGS Viola M. Davidson*, Specialty Vessel

#### *CCGS Cap Perce*

After serving as a training vessel with the Coast Guard College since 2005, the state-of-the-art, Cape Class design Search and Rescue lifeboat *CCGS Cap Perce*, constructed by Victoria Shipyards Co. Ltd. in Victoria, British

Columbia, was transferred in September to the Québec region to support its Search and Rescue program. It was then transferred to the Kégaska Station, located on Québec's north shore, and officially came into service on June 24, 2010. Primarily intended for Search and Rescue operations, *CCGS Cap Perce's* area of operation encompasses the waters between Natashquan, Québec, and Harrington Harbour, Québec.

### Vessels under Construction

Fleet also had a number of vessels that either began or continued construction in 2010–2011. As part of the Fleet Renewal Plan and the Economic Action Plan, Fleet received substantial funding and a great opportunity to replace the capacity of aging vessels.

#### *Search and Rescue Lifeboats – Cape Class Design*

By March 2011, construction of five new Cape Class vessels was nearing completion in Victoria Shipyards, British Columbia: *CCGS Cape Rescue* (Central and Arctic region), *CCGS Cap Aupaluk* (Québec region), *CCGS Cape Dauphin*, *CCGS Cape Naden* and *CCGS Cape Palmerston* (Pacific region). These new ships were funded by Canada's Economic Action Plan and, once in service, will be dedicated to increasing Fleet's Search and Rescue capability.



*CCGS Cap Aupaluk*, SAR Lifeboat

### ***Near-Shore Fishery Research Vessels***

Also funded by Canada's Economic Action Plan, construction continued on three Near-Shore Fishery Research Vessels: *CCGS Vladykov*, *CCGS M. Perley* and *CCGS Leim*. These vessels will be dedicated to DFO's Oceans Science program.

### ***Mid-Shore Patrol Vessels***

Finally, construction continued as planned on two Mid-Shore Patrol Vessels: *CCGS Private Robertson V.C.* and *CCGS Corporal Kaeble V.C.* These are the first of nine Mid-Shore Patrol Vessels to be delivered, and are expected to be in operation with Fleet by 2013. These vessels will form Canada's new "Hero Class" of vessels and will be named after heroic Canadians who put their duty ahead of their safety in service to their country. They will be named *CCGS Corporal Kaeble V.C.*, *CCGS Private Robertson V.C.*, *CCGS Corporal Teather C.V.*, *CCGS Constable Carrière*, *CCGS G. Peddle*, *CCGS Corporal McLaren M.M.V.*, *CCGS A. LeBlanc*, *CCGS M. Charles* and *CCGS Captain Goddard M.S.M.*

### **Decommissioned Assets**

When vessels and helicopters reach or surpass their useful life, they are decommissioned by Coast Guard. Decommissioned vessels are usually sold as a whole, but can also be sold for parts or recycled. In 2010–2011, two Coast Guard vessels were decommissioned: *CCGS Pandalus III* and *CCGS Shark*. Additionally, *CCGS Wilfred Templeman* and *CCGS Nahidik* were not used for any programs and were declared surplus in 2010–2011. Finally, Fleet disposed of one helicopter in 2010–2011, the CG 253, a Sikorsky S-61.



*CCGS Pandalus III*, Near-Shore Fishery Research Vessel, a decommissioned asset  
Photo: A. Jones

### **Chartered Vessels**

Demand for Fleet services is consistently high and continually increasing. In some cases, the number and/or configuration of available vessels is not sufficient for Fleet to deliver programs in a timely fashion. When this occurs, Fleet relies on the practice of chartering private vessels. Chartered vessels are fully configured, equipped, operated and crewed by Fleet personnel.

For the past five years, Fleet has chartered *CCGS Cape Mariner IV*, a specialty vessel dedicated to the Conservation and Protection program under Ecosystems and Fisheries Management. Because of its own operational requirements, the owner of the ship had to reclaim *CCGS Cape Mariner IV* in May 2010. *CCGS Cape Mariner IV* was eventually replaced by *CCGS Kode and Kin*, which came into service in November 2010. Like *CCGS Cape Mariner IV*, *CCGS Kode and Kin* operates out of Saint John, New Brunswick and serves the Maritimes region.



CCGS *Cap Perce*, SAR Lifeboat

### **New Search and Rescue Station in Kégaska, Québec**

On January 19, 2009, the Honourable Gail Shea, Minister of Fisheries and Oceans, announced that a new Search and Rescue station would be created in Kégaska, Québec. Kégaska is a remote village of approximately 130 residents located on Québec's north shore. It is accessible

only by plane, boat, snowmobile or all-terrain vehicle. However, because of the presence of heavy commercial fisheries activities, pleasure craft and commercial maritime traffic, the location was deemed a strategic one for a Search and Rescue station. *CCGS Cap Perce* was assigned to the station and began operations on June 24, 2010.

## 6 Way Forward

The Canadian Coast Guard Fleet will continue to respond to its clients' evolving needs in the professional, efficient and adaptable manner they have come to expect. This response will require ships, vessels, and helicopters that are highly adaptable and can multitask as they serve a wide variety of clients, in a number of different environments and conditions. It will also require solid partnerships across the government as well as with other public institutions.

Furthermore, Fleet will continue to invest in its information systems to ensure that a continued supply of sufficient and appropriate information is available to management on a timely basis to support effective and efficient decision making.

### FLEET INFORMATION SYSTEMS

#### iFleet

iFleet is an integrated system that will be used to replace the Fleet Activity Information System. iFleet captures activities, fuel, position, and service delivery context carried out by CCG assets. It will also be used as the means of communicating sailing orders to the vessels. It is to be implemented across the country by the end of March 2012. The deployment will include the installation of the software and the training of all seagoing personnel at the MAO-02 level and above.

#### Geographical Information Systems

The geographical information system, Common Operating Picture, has been in production since March 2010. The Common Operating Picture can be leveraged by all Coast Guard directorates requiring geospatial capability. To date, Marine Security Operations Centres, Marine Communications and Traffic Services and Intelligent Transportation Systems are investigating the Common Operating Picture for use in their organizations.

#### Iris

The Iris application is an information system used to relay messages between the Regional Operations Centres and the National Coordination Centre in Ottawa regarding vessel and helicopter positions, program tasking, and operational status. It was successfully delivered during the 2010–2011 fiscal year and is currently in use by all Regional Operations Centres across the country.

#### Common Core

The Common Core, a repository of vessel information, was deployed last fiscal year and is the foundation for all systems development done in Fleet. There is significant interest in using the Common Core across Coast Guard for use in other application development endeavours.

## SERVICE LEVEL AGREEMENT BETWEEN FLEET AND MARITIME SERVICES

The Fleet Operational Readiness program directly supports the activities and programs of the Maritime Services directorate, which is responsible for the delivery of Coast Guard programs, as follows:

- Aids to Navigation;
- Environmental Response;
- Icebreaking;
- Marine Communications and Traffic Services;
- Search and Rescue; and
- Waterways Management.

These programs and services are intended to provide the clients and stakeholders with safe, efficient and accessible waterways as well as to protect marine areas from environmental damage. The Fleet Operational Readiness program provides the platforms to deliver these essential Coast Guard programs and services.



Removing a buoy  
Photo: A. Jones

To increase transparency and internal accountability, in 2010–2011 the Fleet directorate formalized the levels of service provided to Maritime Services through the development of a service level agreement that will be in effect from April 1, 2011 until March 31, 2014.

## NORTHERN STRATEGY

As the strategic importance of Canada's Arctic grows, we understand our challenges: assisting the Government of Canada in fulfilling its current and future Northern Strategy, improving strategic awareness, enhancing understanding of vulnerabilities, responding to increasing and evolving service demands, and adapting ourselves in a changing and complex environment. Coast Guard will act on several fronts.

Throughout 2010–2011, Coast Guard, in partnership with DFO and other government departments and agencies, has made significant contributions toward the four priority areas of the Northern Strategy, including exercising our Arctic sovereignty, promoting social and economic development, protecting the North's environmental heritage, and improving and devolving northern governance. We have made these contributions by:

- escorting commercial ships through ice to ensure access to northern communities;
- supporting scientific endeavours such as hydrographic charting and marine science;
- maintaining aids to navigation in Canadian Arctic waterways;
- delivering primary response capability to respond to pollution incidents north of the sixtieth parallel;
- providing maritime Search and Rescue services;



CCGS *Henry Larsen*, Medium Icebreaker, in the Arctic

- providing a safety radio communication service from two seasonal Arctic Marine Communications and Traffic Services: Inuvik in the west and Iqaluit in the east;
- broadcasting weather and ice information and navigational warnings;
- delivering food, cargo and fuel to remote sites where commercial services are unavailable;

- conducting joint exercises with the Department of National Defence, the United States Coast Guard and other international partners; and
- developing an improved awareness of the Arctic maritime domain through vessel identification and tracking security initiatives.

In 2010–2011, the Canadian Coast Guard completed the distribution of Environmental Response equipment packages in the Arctic under the Health of the Oceans Initiative, bringing the total number of Arctic equipment depots to 22.

As one of the most identifiable symbols of Canadian presence in the North, Coast Guard helps to reinforce both Canadian Arctic sovereignty and assets in Canada's North through the presence of Coast Guard personnel and Coast Guard's role in northern maritime shipping. Alongside the activities of other parts



CCGS *Amundsen*, Medium Icebreaker  
Photo: Winnipeg Free Press

*The True North is our destiny. . . . To not embrace its promise now at the dawn of its ascendancy would be to turn our backs on what it is to be Canadian. . . . As Prime Minister Diefenbaker said . . . in 1961, “There is a new world emerging above the Arctic Circle.” It is this world, a new world for all the peoples of the Arctic regions that we in Canada are working to build.*

*— Prime Minister Stephen Harper,  
August 2008, Inuvik, Northwest Territories*

of DFO, Coast Guard advances the goals of the government’s Northern Strategy, and keeps Arctic waterways open, safe and clean.

We recognize that our role as Canada’s civilian maritime on-water service provider has never been more important or more demanding. Every

day, our women and men dedicate themselves to serving our clients and Canadians.

Should you have comments regarding this publication, please contact any of the persons named in Section 7.



CCG Helicopter flying into the horizon

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Photo: R. Borden