Fisheries and Oceans Canada
Pêches et Océans Canada

Canadian Coast Guard
Garde côtière canadienne

Canadian Coast Guard
2009-2010
FLEET ANNUAL REPORT

Saluti Primum, Auxilio Semper
Safety First, Service Always

Canada

On the cover: *CCGS Henry Larsen* - Medium Icebreaker at Kugaaruk, Nunavut

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(Reporting period: April 1, 2009 to March 31, 2010)

Coast Guard Ship Faces Challenging Conditions

MESSAGE FROM THE DIRECTOR GENERAL, FLEET, CANADIAN COAST GUARD (CCG)

I am once again very proud to present the Fleet Annual Report for the Canadian Coast Guard (CCG). This report, covering the period from April 1, 2009 to March 31, 2010, is our fourth opportunity to explain to Canadians, clients, employees, and interested parties the role, services, and capabilities of the CCG Fleet. In so doing, the report attempts to demonstrate value for money but does not hesitate to address shortcomings, gaps, and risks with a view to improving our services and capabilities. Additional information regarding the CCG Business Plan and CCG Strategic Human Resource Plan is available at www.ccg-gcc.gc.ca.

This year's report focuses on how safety permeates everything we do to support the Federal Government's on-water programs and activities. These include maritime Search and Rescue (SAR), support to maritime security, fisheries conservation and protection, icebreaking, aids to navigation, and other on-water activities. Our internal safety and security management system and protocols are crucial to ensuring we perform these activities in a safe manner. Our personnel must be able to quickly and safely adapt to changing circumstances when at sea, especially when carrying out risky but necessary operations.

A Culture of Safety

The Canadian Coast Guard Fleet focuses on safety to ensure that it is able to provide the best assistance possible to persons in distress on the water. This is accomplished by making every effort to make safety top of mind with regards to our employees, our operations, and our management practices.

Gary B. Sidock
Director General, Fleet
Canadian Coast Guard

Personal Safety – As most CCG operations take place in a risk-based environment, personal safety, including protective equipment, training, procedures, and task hazard analyses are a priority.

Safety of Operations – all vessels operate under codes of rigid safety, personnel, and maintenance management practices.

A "Safety" Organization – as an organization focused on safety, we continuously strive to improve our performance through sound management of incidents, learning from our mistakes, and following all standards as they apply to a safe working environment.

In this way, safety is the prime directive for each of our employees and becomes an operational philosophy for any action undertaken in the often challenging physical environment in which the Fleet operates.

These are dynamic and exciting times for the CCG Fleet. In terms of Fleet Renewal, we continue to make solid progress on the design and construction of those large vessels already funded in previous Federal Budgets (details are in Section 3). In particular the Mid-Shore Patrol Vessel (MSPV) construction program is well in hand with the first of the nine vessels expected for delivery in the fall of 2011. In addition, CCG is entering its final year of the $175 million Economic Action Plan (EAP) with many of the vessel life extensions (VLEs), refits, small vessel and small craft acquisition projects delivered and complete, or on schedule for final completion, by March 31, 2011.

Regarding finances, while we have seen progress in terms of asset replacement, the Department of Fisheries and Oceans (DFO) and CCG, including the Fleet, are still facing financial challenges to its operating budget. With salary budgets frozen, operating efficiency initiatives have been implemented to reduce costs while maintaining a high level of service to clients, even with increased levels of activity and program demands. It is likely this fiscal climate will continue for the short to medium term - possibly the next two to three years - while Government departments and agencies work to restore the fiscal balance that Canadians expect.

Much of the Fleet's visibility is a result of its high profile on-water operations, although some of this year's most outstanding successes were achieved through operational preparedness and planning. Two areas of note include our important role in support of enhanced on-water security and safety during the Vancouver 2010 Olympics and the Fleet's very high level of H1N1 and pandemic planning and preparedness during the influenza crisis. I would like to congratulate all those involved in the planning and delivery of the Fleet's support to the Vancouver 2010 Winter Olympics. Their dedication was in the best tradition of the Fleet, and CCG as a whole. I would also like to point out that our efforts – both before and during the H1N1 pandemic period – resulted in uninterrupted service, while at the same time ensuring that the health and the protection of our seagoing personnel remained a priority.

During the past year, CCG and the Fleet continued to focus on its human resource challenges. In the case of the Fleet, many highly experienced employees are expected to retire over the next few years. At the same time, more marine personnel will be needed to sail aboard our newly built vessels. Other pressures, such as the requirement for more marine engineers to meet the needs of implementing the Vessel Maintenance Management strategy, as well as the need for project managers of all backgrounds, will further increase the demand for competent marine personnel. Some initiatives are well underway to help address these challenges. These include increased intake of Officer-Cadets at the CCG College beginning with the 2009-2010 freshman class (up to 64 from

48), launching the implementation of the Ship's Crew Certification Program, enhanced arrangements with provincial nautical schools, and significant progress on recruiting and retention led by the CCG National Labour Force Renewal Group.

CCG and the Fleet have made good progress in a number of important areas this past year, but much remains to be done. Now more than ever, we are committed to ensuring Fleet employees have the resources, equipment, professional development and capabilities they need in order to continue to serve Canadians in the best way possible.

I hope that you will find this edition of the Fleet Annual Report an informative summary of our activities during this past year.

Above all, please remember that every Coastie is a recruiter.

Saluti Primum, Auxilio Semper

Gary B. Sidock
Director General, Fleet
Canadian Coast Guard

CCGS Cape Cockburn, SAR Lifeboat

1 SERVING CANADIANS...SAFELY

Whether it is to support Canada's vital commercial fishing industry, maritime transportation, shipping, tourism, or the country's millions of recreational boaters, the Canadian Coast Guard is always there and ready to serve. A nationally recognized symbol of sovereignty, the Canadian Coast Guard serves on three oceans, the St. Lawrence River and Great Lakes, and other major waterways. Often CCG is the only federal presence in many remote communities, particularly in the Arctic, operating along the longest coastline in the world and in some of its most difficult weather conditions. On duty 24 hours a day, every day of the year, the Canadian Coast Guard is expected to deliver services not only in line with our level of service, but safely at all times and under all circumstances.

The Canadian Coast Guard Fleet is at the heart of CCG's on-water operations. CCG's fleet of vessels and helicopters, managed and operated by Fleet Headquarters and Regional Fleet Directorates across Canada, plays a strong but evolving marine role along the world's longest coastline and longest inland waterway, and in Canada's 3.7-million-km^2 exclusive economic zone. The Fleet consists of 116 vessels and 22 helicopters - from agile search and rescue lifeboats to icebreakers capable of breaking through several feet of ice. The Fleet has the Government of Canada's only ice-capable vessels that can navigate the treacherous ice in the waters of the Arctic, the Newfoundland and Labrador coasts, the Gulf of St. Lawrence, and the Great Lakes. Some 2400 skilled seagoing uniformed officers and crew provide

SAR Officers on a Fast Rescue Craft

Canadians with a sense of security when they arrive on the scene, whether in the course of their regular duties or during an emergency. On land, another 2100 employees across Canada serve as the backbone of the CCG agency, and support our seagoing staff.

On any given day, CCG:

- Saves 8 lives;
- Assists 55 people in 19 search and rescue cases;
- Services 55 aids to navigation;
- Handles 1,547 marine radio contacts;
- Manages 2,325 commercial ship movements;
- Escorts 4 commercial ships through ice during ice season;
- Carries out 11 fisheries patrols;
- Supports 3 hydrographic missions.
- Supports 8 scientific surveys;
- Deals with 3 reported pollution events; and
- Surveys 5 kilometres of navigation channel bottom.

The Canadian Coast Guard's mandate is derived from the *Constitution Act of 1867*, which gives the federal government exclusive authority over navigation, shipping, beacons, buoys, lighthouses, and Sable Island. Although CCG has existed in some form for many decades, the *Oceans Act, 1996*, and the *Canada Shipping Act, 2001* confirm its specific mandate. The *Canada Shipping Act* confers on the Minister of Fisheries and Oceans responsibilities, powers and obligations with respect to aids to navigation, Sable Island, Search and Rescue (SAR), Environmental Response (ER) and vessel traffic services. The *Oceans Act* confers on the Minister of Fisheries and Oceans responsibility for services for the safe, economical, and efficient movement of ships in Canadian waters, through the provision of aids to navigation, marine communications and traffic management services, icebreaking and ice management services, and channel maintenance. It also gives the Minister responsibility for SAR, ER and support of other federal government departments, boards and agencies through the provision of ships, helicopters, and other services.

Science in the North
Photo: Winnipeg Free Press

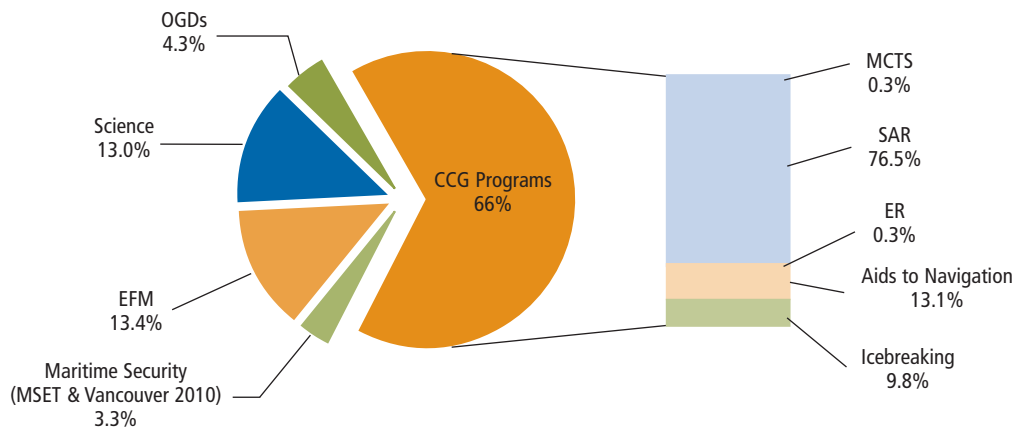
1.1 Our Clients

As owner and operator of the Government of Canada's civilian fleet, the Canadian Coast Guard Fleet's skilled and professional employees serve clients in all sectors of the Canadian economy: the general public, commercial carriers and shippers, ferry operators, fishers, recreational boaters, coastal communities, and other federal government departments and agencies. As CCG's on-water delivery agent, the Fleet provides vessels and maritime professionals to:

- Deliver on-water CCG services related to search and rescue, maritime security, enforcement, environmental response, icebreaking, aids to navigation, marine communications and traffic services, scientific research, and waterways management;
- Respond to federal maritime priorities and natural or man-made emergencies as a key player in various activities mandated under the Federal Emergency Response Plan;
- Participate in national and international planning and exercises related to ER and SAR;
- Support DFO science activities and the conservation and protection of fishery resources;
- Support the on-water needs of OGDs such as Natural Resources Canada and Environment Canada; and
- Support the non-military activities of the Department of National Defence (DND), Canadian Border Services Agency (CBSA), Public Safety Canada, the Royal Canadian Mounted Police (RCMP), and Transport Canada (TC).

Graph 1 illustrates the distribution of the Fleet's clients in 2009–2010. It shows that 66% of our services were dedicated to CCG programs, the largest being Search and Rescue (SAR). Other programs in this category include Environmental Response (ER), Marine Communications and Traffic Services (MCTS), Aids to Navigation and Waterways Management, and Icebreaking. The other 34% of our services were dedicated to Ecosystems and Fisheries Management (EFM) - formerly known as Fisheries and Aquaculture Management - Science, other federal

Graph 1: Distribution of Fleet Clients, 2009-2010 (% of Total Operational Days)



government departments and agencies (OGDs) and Maritime Security. These percentages of service delivery are generally consistent with those of previous years.

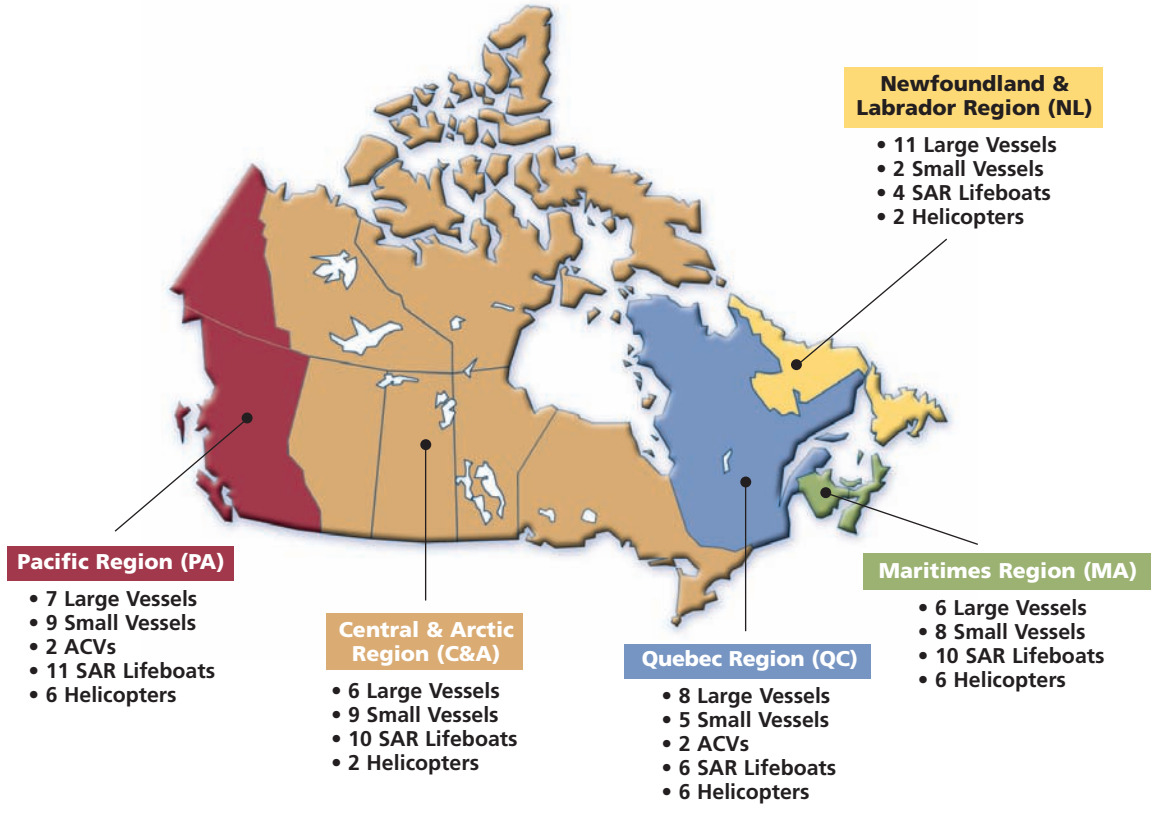
1.2 Our Operations

As our country's only civilian fleet, the Canadian Coast Guard Fleet must always be ready to undertake marine missions in the service of the people and Government of Canada. The Fleet's operations often occur in some of the most hostile weather conditions on the planet. Over the course of a year, our personnel face many physical risks including:

- Air temperatures ranging from –40°C to +40°C;
- Water temperatures ranging from –2°C to +30°C;
- Changing ice formations due to climate change;
- Gale- or hurricane-force winds;
- Waves that can exceed 20 m in height; and
- Operations in remote locations and uncharted areas.

The Fleet fulfills its diverse responsibilities by being versatile, proactive, and highly adaptable, with safety always top of mind. It operates out of five regions, with each Regional Operations Centre (ROC) tasking and deploying vessels in line with the Fleet Operations Plan to fulfill service commitments and mandated obligations. Graph 2 shows the distribution of vessels by region in 2009–2010.

Graph 2: Distribution of Vessels by Region, 2009–2010



1.3 Our Environment

The Canadian Coast Guard Fleet's operations and services are influenced by ebbs and flows in our economy, our environment and our society as a whole. Our clients' world is also in constant flux, requiring us to adapt service requirements and priorities to elements that are often outside anyone's control.

Factors placing increased demands on the Fleet's support to Icebreaking, Search and Rescue, Environmental Response, and Waterways Management services, for example, include increases in maritime traffic, technological advancements, and climate change-related events such as fluctuating water levels and extended shipping seasons. The Fleet must also ensure its capacity to respond to the Government of Canada's evolving maritime priorities and to increased global interest and scrutiny regarding the protection of marine habitats. The increasing emphasis on Canada's presence in the Arctic, for example, creates both challenges and opportunities. It is therefore paramount for the Fleet - and CCG as a whole - to find a way to balance the needs, demands, and expectations of Canadians, clients, and stakeholders with available resources.

A maritime nation such as ours has no choice but to rely on an effective, efficient, adaptable, and mission-ready fleet of vessels and helicopters. The initiatives outlined in this report have been undertaken to help ensure that the Fleet can address its challenges and continue to improve its performance. The Fleet's priorities include providing further support to our maritime professionals to help them respond with confidence to incidents and crises, and provide increased quality services to our clients, partners, and all Canadians.

CCGS Cape Mudge, SAR Lifeboat

Canadian Coast Guard Ship Heading Out to Sea

2 OUR PEOPLE...OUR SAFETY IS OUR CONCERN

The Canadian Coast Guard Fleet's competitive advantage lies in its professional and dedicated workforce. The women and men of the CCG are proud stewards of Canada's maritime tradition and their work supports all federal government maritime priorities. Both on land and at sea, CCG professionals work tirelessly in all conditions to provide a strong federal presence, deliver quality services to clients and protect our citizens, our waters, and the natural resources of our marine environment. Ensuring that they can do so as safely as possible is not only our responsibility, but our duty.

Coast Guard Personnel Prepare to Deploy a Buoy
Photo: Environment Canada

Lisa Laurie and Karen Macfie, General Technicians - NL

2.1 Who We Are: Diverse and Dynamic

Working for the CCG means working for an exciting organization committed to serving Canadians safely. Few careers present such a variety of challenging opportunities, both on land and at sea, in almost every region of the country. Seagoing personnel – the Ships' Officers (SO's) and Ships' Crew (SC's) – who operate our fleet of vessels and hovercraft comprise over half (54%) of the CCG workforce of 4,554 employees. While our fleet represents the most significant visible presence of the Canadian Coast Guard to the general public, there are a number of vital functions carried out by our shore-based personnel in areas such as: safety and security, fleet management (human resources and financial planning, policy development, operational

A Day of Safety, Every Day
Fire Drill on Board the *CCGS Amundsen*

On February 13, 2010, the crew of the *CCGS Amundsen* conducted a fire exercise to test the effectiveness of their safety procedures in the case of an emergency. While sailing in the Cap Rouge area, approaching the Quebec Bridge, *CCGS Amundsen* sounded the general alarm at 15:33pm, and announced the presence of a fire in the ship's wheelhouse to the ship's crew. A series of procedures took place to secure the ship, seal the fire area, locate missing ship's crew and provide medical assistance to anyone injured. Thirty minutes later, the fire was controlled. The crew then proceeded with an abandon ship drill using the vessel's lifeboats and life rafts.

Such drills and exercises are conducted on the Fleet's vessels on a regular basis to enable crews to react quickly and work as a team while putting emergency plans in action during high-stress events.

In order to comply with Transport Canada's Fire and Boat Drills Regulations and the principles of the ISM Code, drills and exercises must be performed at least on a monthly basis, be recorded in the ship's Log Book and in the Commanding Officer's change-over notes and include the following elements:

a) Crew boarding and manoeuvring of boats away from the ship shall be carried out, at a minimum, semi-annually;

b) Radio communication systems are to be tested; and

c) Donning of immersion suits shall be carried out, at a minimum, semi-annually.

A debriefing is also required as soon as possible after each exercise, and should include as many of the participants as possible.

Thanks to these simulation exercises and drills, the Fleet is continuously updating and improving emergency procedures to ensure maximum safety for its seagoing personnel.

Captain Smith on His Time Off with his Community Volunteer Fire Team

support to the fleet, and technical support and maintenance of our assets); and administrative services.

The Canadian Coast Guard values its employees and places a great deal of importance on maintaining effective working relationships with the bargaining agents who represent them. Our diverse workforce is represented by seven bargaining agents. Two of these, the Canadian Merchant Services Guild (CMSG) and the Public Service Alliance of Canada (PSAC) through the Union of Canadian Transportation Employees (UCTE), represent the Fleet's Ships' Officers (SO) and Ships' Crew (SC), respectively. These unions are fully engaged with CCG on identifying and mitigating occupational health and safety concerns, particularly for seagoing personnel and technicians who service equipment in remote areas.

Due to the dynamic nature of the Fleet's operations, the total number of seagoing employees on strength varies over the course of the year through seasonal, term, and casual employment. Table 1 shows the distribution of marine personnel by employment type.

Table 1: Distribution of Marine Personnel by Employment Type, as of March 2010

	NL[1]	MA	C&A	QC	PA	Nationally
SHIPS' OFFICERS						
On strength (FTE[2])	216	207	101	160	164	848
On Strength (term)	4	7	7	8	19	45
Total SOs on strength	**220**	**214**	**108**	**168**	**183**	**893**
SHIPS' CREW						
On Strength (FTE)	360	297	124	195	253	1229
On Strength (term)	60	60	35	47	103	305
Total SCs on strength	**420**	**357**	**159**	**242**	**356**	**1534**
HOVERCRAFT PILOTS, NAVIGATORS, ENGINEERS, and CREW						
On strength (FTE)	-	-	-	14	43	57
On strength (term)	-	-	-	2	0	2
Total GTs, EGs, and SCs on strength	**-**	**-**	**-**	**16**	**43**	**59**
Total	**640**	**571**	**267**	**426**	**582**	**2486**

[1] NL, Newfoundland and Labrador Region; MA, Maritimes Region; C&A, Central and Arctic Region; QC, Quebec Region; PA, Pacific Region

[2] FTE, full-time equivalent

[1] Data from the MariTime Fleet Management System.

The Canadian Coast Guard College has provided training since 1965. This bilingual institution delivers the CCG Officer Training Program, the primary source for recruitment of SOs. It also provides career programs in MCTS, and highly specialized training in SAR, ER, marine equipment maintenance, and electronic equipment operation. While the intake of Officer-Cadets has been steadily increasing in recent years, we were pleased to note the impressive 2009-2010 intake of up to 64 Officer-Cadets, up from 48 in 2008-2009. This is a step in the right direction toward increasing the sustainability of our workforce.

The Canadian Coast Guard College: A Unique Experience

For more than 40 years, the College has offered an education unlike any other and has built a solid reputation for top-notch maritime training. Over 1,000 officer cadets have graduated from the institution, taking their acquired skills across Canada and around the globe.

What's Does the College Offer?

Graduates of the four-year CCG Officer Training Program receive commercial certification in either marine engineering or marine navigation, a Bachelor of Technology in Nautical Sciences degree from Cape Breton University, and a diploma from the CCG College.

The College also offers other programs:

- A nine-month basic training program in marine traffic regulating procedures and radiocommunications;
- Marine maintenance and equipment courses to prepare electronic technologists to maintain and repair all marine equipment used on ships and technical equipment used on shore to assist navigation;
- ER courses for government departments and private sector individuals involved in oil spill response; and
- Specialized SAR programs exclusively for CCG and the DND personnel assigned to Joint Rescue Coordination Centres, Maritime Rescue Sub-Centres or aboard CCG ships.

More than an Education

While students master navigational systems and ships' engines and control systems, they also learn some important values, such as the importance of ensuring their safety and that of their co-workers in the performance of their duties. The College is a residential facility that instils a sense of family and teamwork that Officer-Cadets appreciate once they take up their first vessel assignment. In exchange for their tuition-free education, room and board, and monthly allowances, graduates commit to working on board Canadian Coast Guard vessels as navigation or marine engineering officers for four years. After this period, many opt for a lifelong career with CCG.

How to Apply

The College accepts applications for enrolment in the CCG Officer Training Program from September until January for the following academic year, which begins in September. Potential recruits should contact the College either by calling 902-567-3208 or by visiting their website at **http://www.cgc.gc.ca**.

Planning for the Future

Succession planning is a key success factor for the Canadian Coast Guard in general and the Fleet in particular. Table 2 shows how the marine personnel members on strength are distributed by age, with a majority of Ships' Officers (SOs) and Ships' Crews (SCs) aged 45 and older. By 2013, 30% of CCG seagoing employees (17% of SCs and 21% of SOs), will be eligible for retirement and will need to be replaced. The Fleet will also need to hire nearly 100 additional seagoing and shore-based employees to serve aboard its new vessels.

Since Canada does not have a large merchant marine from which to attract already certificated personnel, the Fleet must accurately predict its needs in terms of SOs and SCs well in advance. For the most part, certification is a multi-year process. Receiving the highest levels of certification (1st Class Engineer and Master Mariner) can take approximately 15 years. For this reason, the

Table 2: Distribution of Marine Personnel by Age Category, as of March 2010

	NL[1]	MA	C&A	QC	PA	Nationally
SHIPS' OFFICERS						
Average age (FTEs[2])	45	48	44	45	45	45
Less than 45	85	50	47	72	73	327
Aged 45 to 54	110	112	47	76	71	416
Aged 55 to 59	16	33	11	17	24	101
Aged 60 or greater	9	19	3	3	15	49
Total SOs on-strength	**220**	**214**	**108**	**168**	**183**	**893**
SHIPS' CREW						
Average age (FTEs)	47	51	46	48	42	47
Less than 45	159	63	68	74	181	545
Aged 45 to 54	170	200	67	109	117	663
Aged 55 to 59	59	66	21	45	40	231
Aged 60 or greater	32	28	3	14	18	95
Total SCs on-strength	**420**	**357**	**159**	**242**	**356**	**1534**
HOVERCRAFT PILOTS, NAVIGATORS, ENGINEERS, and CREW						
Average age (FTEs)	–	–	–	47	38	42
Less than 45	–	–	–	3	30	33
Aged 45 to 54	–	–	–	11	12	23
Aged 55 to 59	–	–	–	2	1	3
Aged 60 or greater	–	–	–	–	–	–
Total GTs, EGs, and SCs on-strength	**0**	**0**	**0**	**16**	**43**	**59**

[1] NL, Newfoundland and Labrador Region; MA, Maritimes Region; C&A, Central and Arctic Region; QC, Quebec Region; PA, Pacific Region

[2] FTE, full-time equivalent

Fleet's succession planning practices include the development of ships' competency (crewing) profiles. These crewing profiles outline the required professional competency, certification, technical training, and experience required to perform duties in accordance with the Marine Personnel Manning Regulations found in the *Canada Shipping Act*, 2001; and includes the training requirements necessary to ensure safety in all operations. In addition to their regulatory function, crewing profiles help our SOs and SCs align their career paths with Fleet Management's succession planning requirements.

2009–2010 Results

Classified **National Model Work Descriptions** for all Ships' Officers and Ships' Crew;

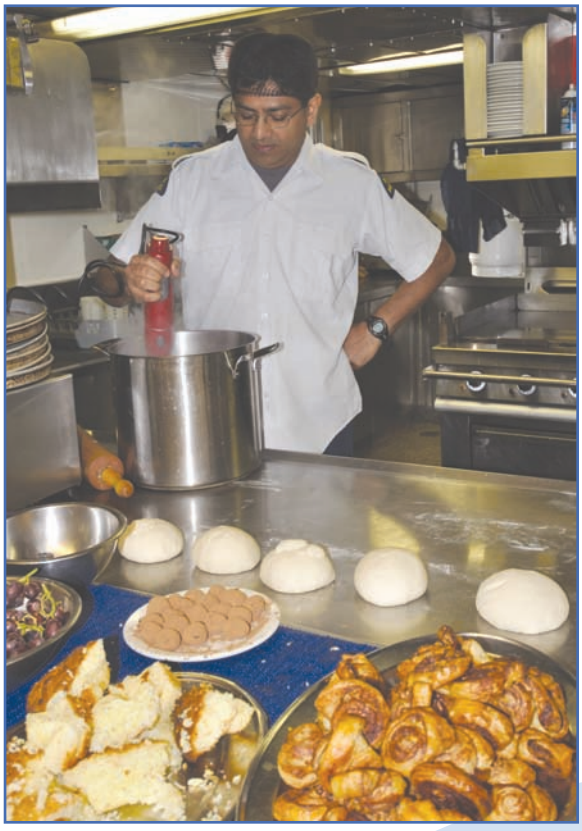
Established a standard organization for the Regional Fleet Management Organization (RFMO); and

Signed an **Essential Services Agreement for Ships' Crew** with the Public Service Alliance of Canada (PSAC) and Treasury Board recognizing that the CCG Fleet and all its associated Ships' Crew positions are full-time essential (Code 1) while on duty.

Increasing Diversity

The Canadian Coast Guard is committed to building a respectful and welcoming workplace that employs people as diverse as the population it serves. Implementing employment equity creates a working environment that attracts, hires, and keeps the best talent available.

In 2009, the Canadian Coast Guard created and implemented the Employment Equity Management Action Plan (EE MAP) Report Card. Results demonstrate that we are reducing barriers to employment faced by employment equity designated group members. By recruiting and showcasing the work of employment equity designated group members in promotional materials, we create opportunities to increase overall representation. CCG has increased overall national representation by an average of 5% each of the past five years. With the commitment of our Commissioner, and the support of our employees, CCG will continue to improve representation of all groups, with particular focus on persons with disabilities and visible minorities. Additionally, the Operational Women's Network (OWN) provides a voice for the women working in the Fleet to present their concerns directly to management executives.



Surya Misra - Chief Cook on the *CCGS W.E. Ricker*

2009–2010 Results

Ensured full engagement of the Operational Women's Network at Fleet Executive Board level;

Established a bi-annual report card system to track progress on the 2008-2011 Employment Equity Management Action Plan; and

Enhanced recruitment of designated group members.

2.2 What We Do: Skilled and Prepared

The safety of any workplace depends on ensuring that employees know what is expected of them, have access to the necessary equipment, and receive adequate training to fulfill their responsibilities safely and efficiently. This is particularly true for the Canadian Coast Guard Fleet, whose vast operational network is expected to be at the ready around the clock, in often risky and dangerous conditions.

Training and development is vital to fulfilling the Fleet's evolving mandate and is in keeping with our culture of safety and service. The required certification levels for Canadian Coast Guard seagoing personnel often exceed the levels required by Transport Canada. This is due to the nature of the difficult work that we perform and the often marginal conditions in which it must be undertaken.

Sébastien Cadieux - Navigation Officer on the *CCGS Tracy*

Coast Guard Electronic Technician on Duty

The National Seagoing Personnel Professional Development Plan

In 2009-2010, the Fleet developed an improved National Seagoing Personnel Professional Development Plan. This document outlines the professional training and certification requirements of seagoing personnel both now and into the future. It also highlights the challenges involved in providing a continuous supply of qualified personnel to ensure appropriate service delivery. The Ships' Crew Certification Program framework is part of this plan. It details how we will develop existing Ships Crew members into Ships' Officers, to meet the needs identified through analysis of the Fleet's certificate/age demographic profile.

The Fleet has also established the Seagoing Personnel Management Manual, which provides consistent national direction to regional Marine Superintendents in the management of human resources and training for CCG seagoing employees.

2009–2010 Results

Improved the National Seagoing Personnel Professional Development Plan;

Modernized Canadian Coast Guard Fleet Order 530 – Qualifications Required of CCG Seagoing Personnel, to establish professional certification requirements that meet the needs of the current Fleet in today's marine environment; and

Promulgated the first edition of the Ships' Crewing Profiles. This document defines the minimum certification, training, and experience required for each position on all ships. It also acts as the Safe Manning document required by Transport Canada.

CCG Offers a Career for Everyone

The Canadian Coast Guard provides:

- A variety of ship- and shore-based positions;
- An opportunity to work in all regions of Canada;
- A variety of work schedules, from 28 days of work followed by 28 days of leave to a more familiar, 9-to-5 schedule;
- An increasingly diverse workforce that continually strives to attract more women, Aboriginal people, persons with disabilities, and visible minorities;
- Its own bilingual training institution, the CCG College, which is instrumental in developing highly professional marine personnel to satisfy program and service requirements;
- Excellent benefits such as pension, health and dental plans;
- Employment stability; and
- **Job satisfaction second to none**.

Forget Them Not

Since 1962, the Canadian Coast Guard has stood as a symbol of maritime service in Canada. Thanks to the hard work and professionalism of those who we call our own, we have tried our hardest to live up to our motto of "Safety First, Service Always."

Sadly, despite our steadfast dedication to safety, 35 women and men have lost their lives in the performance of their duties over the years and must not be forgotten. These losses have been hard to accept, but they serve as a reminder of the very real hazards of operating in a dynamic workplace – whether on the ground, in the air, or on the sea.

Memorial Monument

Training and Learning on a Foundation of Safety

In 2008-2009, the Canadian Coast Guard developed a Learning and Development Framework to improve national consistency in the planning, management, and delivery of training. Consultations were held with managers, employees, and bargaining agents on the new Framework. In 2009-2010, the Framework was distributed throughout the Canadian Coast Guard, with clear and transparent learning and development budgets to be established. Investments in people (e.g. employee development, career progression, and skills development) will be resourced, to the extent possible, within available budgets. The Canadian Coast Guard's forthcoming review of training and development expenditures over the past five years will also provide a better understanding of component costs (tuition, fees, disbursements, travel and materials), as well as the time and funds spent on developmental, management, and language training.

In 2009-2010, CCG also put in place proactive measures to improve its official languages capacity with a special focus on service delivery to the public, language of work, and learning and development. It also continued the second phase of the national Leadership Development Pilot Program. This program, launched as a two-year pilot in all five regions in 2007, has given participating employees an opportunity to develop their management skills and gain a broader understanding of the CCG.

2009–2010 Results

- Promulgate the final version of the Continuous Learning and Development Framework;
- Continued second phase of the national Leadership Development Pilot Program;
- Enhanced CCG College official language training capacity;
- Established clear and transparent learning and development budgets; and
- Developed an action plan related to the observations of the Office of the Commissioner of Official Languages (OCOL) following the review of second language capacity in the Maritimes Region.

Improving National Consistency in Human Resources Management

The Canadian Coast Guard has made significant progress on two key initiatives to improve national consistency of human resources management – the development of a Standard Organization model for our regions and an enhanced Performance Review System. The Standard Organization is essential to ensuring that the Canadian Coast Guard conducts its business consistently in each region both in terms of service delivery and distribution of available resources. It also aims to ensure that employees in various regions doing the same work are classified and compensated equally. The Standard Organization was launched in 2009-2010 and transition will take place over the next three years.

Our revised Performance Review System (PRS), designed to improve employee performance, was officially launched in April 2008. It offers an achievable, sustainable, and flexible process that allows all employees to receive more

meaningful performance reviews. For the initial review cycle in 2008-2009, results showed that 92% of employees had identified work objectives. In 2009-2010, the Fleet's seagoing personnel adapted the system and implemented a version tailored to their specific needs. CCG management will continue to encourage performance discussions and monitor the PRS.

Individual Learning Plans (ILPs) are also part of the annual Performance Review System. ILPs help employees identify training requirements, developmental opportunities and career aspirations. In 2009-2010, learning plans were completed for approximately 82% of CCG employees, with the operational realities of work at sea and the transition to a new PRS reporting structure affecting seagoing completion rates. Completion rates are expected to be considerably higher in 2010-2011.

In 2009-2010, the Canadian Coast Guard also assessed the results of the 2008 Public Service Employee Survey (PSES) and distributed the findings to employees and bargaining agents.

2009–2010 Results

- Launched and began transition to the Standard Organization, which includes finalizing development of national model work descriptions for technical and seagoing positions;
- Ensured 82% of CCG employees had completed learning plans;
- Introduced a tailored version of the Performance Review System for seagoing personnel; and
- Assessed results of the 2008 PSES and distributed findings to employees and bargaining agents.

CCGS Des Groseilliers – Medium Icebreaker, in Quebec City, QC

3 OUR VESSELS AND HELICOPTERS… OPERATING SAFELY

Under the Fleet Operational Readiness (FOR) program, the Fleet provides safe, reliable, and operationally capable ships and helicopters with competent and professional crews to respond to on-water and marine-related needs of the Canadian Coast Guard, DFO and other federal government departments and agencies. In this way, the Fleet helps its clients carry out their responsibilities of delivering on their operational mandates, business plan commitments, and available funding.

In 2009–2010, the Fleet operated 116 vessels and 22 helicopters (see Table 3 for class distribution details). Many of these assets are "multi-taskable", meaning that they are able to meet the needs of multiple clients during a single mission. Other assets have specialized capabilities to satisfy a particular client or a specific program requirement, such as Ecosystems and Fisheries Management's (EFM) armed boarding fisheries enforcement requirements.

Crane Lifting a Truck onto the *CCGS Terry Fox* in the NL Region

Table 3: Number of Operational Vessels and Helicopters by Class, 2009-2010

Class	Number
Polar icebreaker	0
Heavy icebreaker	2
Medium icebreaker	4
High-endurance multi-tasked vessel	7
Medium-endurance multi-tasked vessel	4
Offshore patrol vessel	4
Mid-shore patrol vessel	11
Offshore oceanographic science vessel	2
Offshore fishery science vessel	4
Air cushion vehicle	4
Special navaids vessel	3
SAR lifeboat	46
Hydrographic survey vessel	5
Channel survey and sounding vessel	2
Near-shore fishery research vessel	5
Specialty vessel	13
Vessel Total	**116**
Helicopter Total	**22**
Total Helicopters and Vessels	**138**

3.1 Building a More Sustainable Fleet

CCG prides itself on having adaptable vessels that can deliver a variety of services in a safe, secure, effective, and efficient manner. However, over 70% of the vessels in the CCG Fleet are beyond the half way mark of their anticipated life cycle, as evidenced in Table 4 which shows the age of vessels by size in 2009–2010. Despite significant investment since 2003, as the vessels age, more breakdowns occur and maintenance costs increase. Additionally, shore-based infrastructure - such as CCG bases, radio towers, and Marine Communications and Traffic Services (MCTS) Centres - continue to deteriorate and require additional substantive investment. The challenge for the Fleet is to maintain service levels while dealing with aging infrastructure and technological changes, such as the move away from traditional physical aids toward a modern electronic and information-based service.

The Fleet's Investment Plan (FIP) is the only means of internal funding available for investment in our vessels, hovercraft, helicopters, and other Fleet-managed assets.

CCGS Tracy, Navigating the St-Lawrence River, QC

Table 4: Age of Vessels, 2009-2010				
Vessels	Number	Asset Age		
		Over 25 Years Old	15 to 25 Years Old	Under 15 Years Old
Large Vessels Design Life - from 25 to 45 years	39	27	12	-
Air Cushion Vehicles Design Life – 25 years	4	1	-	3
Small Vessels Design Life - 15 to 20 years	73	14	17	42
Vessels	**116**	**42**	**29**	**45**
Helicopters	**22**	**11**	**11**	**-**
TOTAL FLEET	**138**	**53**	**40**	**45**

This plan, updated yearly, allocates funds over a five-year period based on factors such as the overall condition of assets and the results of regulatory inspections. The Fleet is maximizing the use of annual investment funds (currently $91.5 million/year) to replace smaller vessels and refit larger ones, a majority of which are in the second half of their lifespan.

The Fleet is also continuing to develop its Fleet Renewal Plan (FRP), moving consistently closer to becoming more flexible and mission-ready. The FRP takes into account the government's evolving priorities and service demands and will allow for greater flexibility to respond to clients' needs in a complex and changing environment, once fully funded and implemented.

Funding challenges and the aging fleet of vessels and helicopters have led the Government of Canada to approve the portion of the FRP which allows for a number of larger vessels to be built for service-critical programs. The total investment now stands at $1.4 billion for the construction of:

- Nine Mid-Shore Patrol Vessels;
- Three Offshore Fishery Science Vessels;
- One Offshore Oceanographic Science Vessel;
- One Polar Icebreaker; and
- One Air-Cushion Vehicle.

While these replacement vessels are being built, the Fleet still faces significant challenges stemming from the advanced age of many of its currently-operating vessels, particularly those for which funding for replacement has yet to be addressed. For example, the Fleet's icebreakers, constructed decades ago, will soon reach the end of their operational lives. These old vessels are expensive to maintain in operating condition, since more frequent maintenance and repairs make them periodically unavailable for service. This, in turn, reduces the Fleet's overall capacity. More stringent marine regulations in areas such as sewage treatment, asbestos handling, air emissions, and pollution prevention can also impact the Fleet.

The Government of Canada's 2009 federal budget, entitled Canada's Economic Action Plan, included $175 million in stimulus funding for CCG to enable the implementation of previously unaffordable projects. This funding was allocated over a two-year period beginning in fiscal year 2009–2010, and is helping build a more sustainable fleet of vessels while benefiting local economies.

Canadian Coast Guard MBB BO-105 Helicopter, NL Region

The Economic Action Plan provides funding for Vessel Life Extensions of five key vessels (*CCGS Bartlett*, *CCGS Tracy*, *CCGS Cape Roger*, *CCGS Tanu*, and *CCGS Limnos*). It also includes much needed funds to repair larger vessels and for the procurement of 98 new small vessels, lifeboats, barges, and small craft (see Table 5). This will enable CCG to continue to provide services such as Search and Rescue and Environmental Response to marine spills. All major repair work and vessel life extensions announced in the EAP are expected to be completed by March 2011.

Table 5: Economic Action Plan for CCG (Stimulus Budget)

Project	Description	Quantity	Size	Location
VLE	*CCGS Bartlett*	1	64 m	PA
	CCGS Tracy	1	55 m	QC
	CCGS Limnos	1	45 m	C&A
	CCGS Cape Roger	1	63 m	NL
	CCGS Tanu	1	55 m	PA
Refit	Targeted vessels	35	Various	All regions
Acquisition	Near-Shore Fishery Research vessels	3	2 x 22 m 1 x 25 m	MA and QC
	SAR Lifeboats (47-ft Motor Lifeboats - Cape Class)	5	14 m	PA, C&A, QC, MA
	ER barges	30	Various	National
	Small craft	60	Various	National

With stimulus funding set to wind down by March 2011, the Federal Government has provided further funds in its 2010 federal budget to help CCG continue to renew its fleet of aging vessels. Budget 2010 provided $27.3 million to replace an aging CCG hovercraft at the West Coast's Sea Island Base. The new state-of-the-art hovercraft will take over as the primary Search and Rescue response unit. This new funding brings the total amount provided in federal budgets since 2005 to the Canadian Coast Guard for vessel construction and maintenance to more than $2.1 billion.

CCGS George R. Pearkes, High Endurance Multitasked Vessel/Light Icebreaker

The Fleet's Investment Plan, recent Government investments and the initial investment in the 30-year Fleet Renewal Plan are helping the Fleet to continually improve the condition of its assets. However, refitting or replacing aging vessels can take years, making it a challenge to sustain the Fleet and its program activities in the interim. Regardless, the Fleet remains committed to making every effort to ensure that its assets are as safe and operationally ready as possible.

3.2 Replacing Small Vessels

Table 6 outlines the new small vessel builds related to the Fleet Renewal Plan initiative.

2009–2010 Results

Entry into service of *CCGS Kelso*, a Specialty Vessel in Central and Arctic Region to be used for limnographic research in September 2009;

Awarded the contract for the procurement of nine new Mid-Shore Patrol Vessels, the first of which should be ready for service in 2011; and

Procured four new ice operations boats specifically designed for rescue operations, as well as ten new Fast Rescue Craft to replace existing boats near the end of their service life.

Table 6: Small Vessel Replacement

Description	Quantity	Size	Location	Expected Delivery
Specialty Vessel	2	1 x 18 m 1 x 14 m	Provinces of New Brunswick and Prince Edward Island	2010 and 2011
SAR Lifeboat	5	16 m	Pacific Region and the Provinces of Nova Scotia, Ontario, and Quebec	2010 - 2011
Near-shore Fishery Research Vessel	3	2 x 22 m 1 x 25 m	Quebec and Maritimes Regions	2011
Air Cushion Vehicle (Hovercraft)	1	25 m	Pacific Region	2013 - 2014

3.3 Replacing Large Vessels

Table 7 outlines the funded new large vessel replacements.

Table 7: Large Vessel Replacement

Description	Quantity	Size	Location	Expected Delivery
Mid-shore Patrol Vessel	9	43 m	National	2011 - 2013
Offshore Fishery Science Vessel	3	65 m	MA, NL, and PA	2014 - 2015
Offshore Oceanographic Science Vessel	1	90 m	MA	2014
Polar Icebreaker	1	140 m	TBD*	2017

* TBD, to be determined.

2009–2010 Results

Carried out the detailed design activities for the Offshore Oceanographic Science Vessel. The competitive process for the acquisition is targeted to be conducted in 2010-2011; and

Awarded contract for design and construction of three new Near-Shore Fisheries Science vessels, to be delivered by March 2011.

SAR Officers on a Fast Rescue Craft

CCGS Bartlett Gets a New $16.9M Lease on Life

Crossing the Second Narrows Bridge into North Vancouver, it was hard to miss the sight of *CCGS Bartlett* in the Allied Shipbuilders dry dock just a stone's throw from the north end of the bridge. Allied Shipbuilders were the successful bidder on both Vessel Life Extension contracts for the 190ft Canadian Coast Guard Ship. The $1.4 million first phase of the project, awarded under the Government's Economic Action Plan (EAP), was started in July 2009. A second larger $15.5 million contract started in October 2009 and work continued at a hurried pace until its completion in May of 2010. "*This refit will ensure that Bartlett is operational for an additional 10 years, doing what it does best: working on the coast, servicing buoys, doing search and rescue, and Environmental Response*," said Louise Ann Granger, Canadian Coast Guard's project manager for the EAP Vessel Life Extension of the Bartlett.

The contract has allowed the company doing the refit to rehire several employees who had been laid off earlier in the year. In addition, the *Bartlett* project has enabled the shipyard to hire a dozen apprentices in all trade groups, who are obtaining the skills necessary to continue the future of Allied Shipbuilders and the marine industry in BC. The *Bartlett* project has not only benefited Allied, it has been an economic boom for local industry, with over half of the contract value spent on purchasing material and equipment from local suppliers and manufacturers. Now that the *Bartlett's* Vessel Life Extension is complete, the vessel is now ready for another decade of service.

(Source: Dan Bate, Shorelines, Vol. 13, Issue 1)

4 OUR SERVICES…DELIVERED EVERY DAY ON A FOUNDATION OF SAFETY

The following subsections outline the services provided to each client in terms of planned and actual days provided. These planned days of service for clients are part of an annual planning cycle culminating in the development of the Fleet Operational Plan which outlines the schedule for each vessel, client program and mission requirements, and other details. It is important to note that the number of operational days planned and delivered is a function of various factors, including availability, budget, breakdowns, priority overrides, weather conditions and unforeseen events.

The information represents the support provided to these clients by the Fleet only and should not be interpreted as representative of the entire suite of services that a particular client receives.

For example, in some cases it is more efficient for aids and waterways services to be delivered by contractors, and these services are not included in the information provided here. The planned and delivered days contained in this report reflect the use of Fleet assets only. It is also important to note that client program effectiveness information is not included, as this is a program performance function.

Finally, none of our programs and services would be possible without the dedicated and professional women and men who work behind the scenes to maintain our equipment and provide the administrative and planning support that enables front-line staff members to do their jobs safely and efficiently.

SAR Exercise with *CCGS Cap Tourmente*

4.1 Search and Rescue

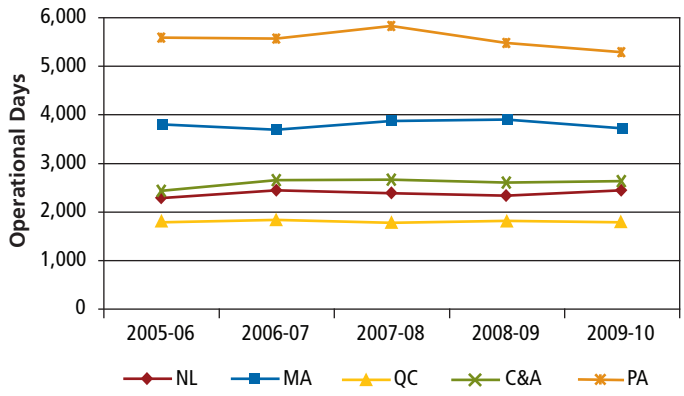
Disasters and emergencies can occur anytime, anywhere. And when they happen on the water, they can quickly become life-threatening. Each year, CCG teamwork between on-shore and at-sea personnel - as well as with DND and with the Canadian Coast Guard Auxiliary (a volunteer organization) - saves about 2,900 lives at risk. Five Canadian Search and Rescue (SAR) coordination centres have the immediate use of all Fleet vessels and aircraft to provide the best possible response to maritime incidents around the clock, 365 days a year. Additionally, 41 specially designed SAR vessels are stationed throughout the country to support search and rescue efforts.

Alain Morissette - Commanding Officer on the *CCGS Cap Tourmente*

Fleet Performance

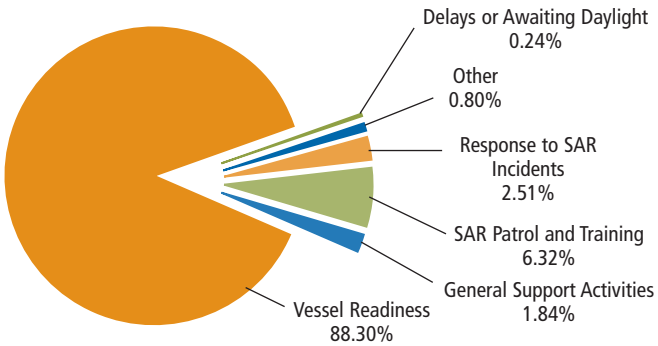
In 2009-2010, a total of 15,790 days were delivered to SAR. This is a slight decrease from the previous year. However, more than 100% (103%) of service was delivered as compared to the original plan, which is consistent with the five year average. The majority of SAR service is planned for and delivered in the Pacific Region (33% of original plan and service delivered). This is primarily due to the West Coast's year-long boating and ice-free season, as well as the larger geographical area being covered.

Graph 3: Service to SAR per Region, 2005-2006 to 2009-2010 (# of Operational Days)



Graph 4 demonstrates that the majority of the 15,790 days delivered to SAR in 2009-2010 can be attributed to vessel readiness. This means that a vessel is available and ready to respond at a moment's notice to calls for assistance. This readiness stance is available to support other activities and clients on a multi-tasked basis. Other notable SAR activities include 360 days spent on SAR incident response and 998 days on SAR patrol and training.

Graph 4: Service per SAR Activity, 2009-2010 (% of Total Operational Days)



Baby on Board

Ships are often named after people who have made their mark, but in Ari Edan Shaw Schiek's case, the opposite is true. In October 2009, his mother Nalia Barkman of Lasqueti Island, British Columbia, went into early labour. With no ferry to the mainland scheduled for two days, Barkman and her husband boarded the Canadian Coast Guard SAR Lifeboat *CCGS Cape Edensaw* while it was tied up at French Creek, hoping for a quick transfer to hospital. It quickly became evident that Ari had other plans, sending the Canadian Coast Guard crew running for towels and boiled water to assist the family's midwife, who luckily met the boat in time to supervise the birth.

In honour of the Canadian Coast Guard crew, the new parents researched the origin of the vessel's name: a cape on the Queen Charlotte Islands named for First Nations chief and artist Charles Edan Shaw. Since Edan means little fire in Gaelic and Ari means little lion in Hebrew, both names seemed fitting for a baby who came into the world making quite a splash. The *Cape Edensaw's* crew has inscribed Ari's name on the ship's bell, a nautical tradition when a baby is born on board.

Baby Born Onboard *CCGS Cape Edensaw* – Pacific Region
By Gordon Lafleur Photography

Canadian Coast Guard During a SAR Case

Rescue on the Ice

It was a beautiful spring day on May 4, 2009 in St. Lunaire, NL when Rex Saunders set out in his 19-foot open boat towards Cape Bauld on the tip of Newfoundland's Northern Peninsula. After an afternoon on the water, the 66 year old sealer decided to head for home but soon struck a small ice pan, causing his cargo to shift and the boat to capsize. He suddenly found himself in the water unable to climb atop the overturned hull of his boat, and finally managed to clamber onto a nearby ice pan.

As night fell, the alarm was raised at the Canadian Coast Guard Maritime Rescue Sub Centre (MRSC) in St. John's. *CCGS Ann Harvey* was tasked to search for Mr. Saunders, who had recently undergone open heart surgery. After the second day, *CCGS George R. Pearkes* joined in the search effort.

As the sun began to rise on day three, the *CCGS Ann Harvey*'s crew grew increasingly concerned that their rescue mission may turn into a recovery effort. Fortunately, a crewmember spotted Mr. Saunders in his orange floater suit sitting on the ice pan where he had spent the last two nights. The *CCGS Ann Harvey*'s FRC team quickly transported the severely hypothermic and hallucinating man to the vessel where Rescue Specialists attended to Mr. Saunders' condition and alerted MRSC to his successful rescue. *CCGS Ann Harvey* transported Mr. Saunders to St. Anthony, NL where he made a full recovery thanks in large part to the keen eyes of the vessel's crew.

(Submitted by: Meghan Carew – NL Region)

CCGS Cap Tourmente, SAR Lifeboat

4.2 Maritime Security

Since September 2001, CCG has been a core partner in Canada's multi-agency approach to maritime security. While we remain an unarmed organization in the law enforcement sense (except for support provided to EFM), CCG has a broad mandate to provide support to other federal government departments and agencies. The federal government, like all Canadians, expects that the Canadian Coast Guard will be ready and able to respond in support of other departments' security mandates. As a result, CCG has received dedicated national security funding to deliver specific maritime security activities. CCG provides vessels, shore-based infrastructure, and other services to the entire Canadian security and enforcement community.

A key aspect of our increased role in supporting the federal maritime security agenda is the Fleet's enhanced participation in the joint RCMP-CCG Marine Security Enforcement Team (MSET) program in the St. Lawrence–Great Lakes region. Four of our vessels patrol the St. Lawrence and the Great Lakes. Their crews assist with border integrity and security in waters where ships naturally cross the border between Canada and the U.S. as many as 23 times during a voyage from Beauharnois, Quebec to Sault Ste Marie, Ontario.

Fleet crews work closely with armed onboard law enforcement personnel, and are exposed to risks and hazards not experienced in traditional programs. To mitigate risks, Fleet employees assigned to MSET vessels receive additional personal protective equipment, law enforcement familiarization training, and police defensive tactics training. This training helps improve employee safety and boosts the on-water effectiveness of MSET through enhanced onboard integration of CCG and law enforcement personnel.

Vancouver 2010

From February 12-28th, 2010, Vancouver hosted the Winter Olympic and Paralympic Games, showcasing to the world our beautiful country and its citizens, as well as the men and women who serve both proudly. The Canadian Coast Guard provided much appreciated support to several government departments during these exciting events. The most significant contribution was related to maritime services in support of the security aspects of the Games, managed by the RCMP. In addition, CCG enhanced some of its usual programs, such as Search and Rescue and Environmental Response, for the duration of the Games. In order to ensure continuity and effective communications in the event of an incident, CCG headquarters and DFO Safety and Security (S&S) jointly established and staffed the Fisheries and Oceans Co-ordinated Olympic Support (FOCOS) Centre in Ottawa.

Various CCG activities supported the Games. CCG accelerated the integration of the Automatic Identification System (AIS) and Long Range Identification & Tracking (LRIT) system to the Department of National Defence (DND) to provide enhanced vessel identification and tracking and greater maritime domain awareness. *CCGS Sir Wilfrid Laurier* provided thirty-three days of service in support of the Canadian Forces' Joint Task Force (JTF 2) as platform support for any necessary on-water operations. *CCGS Vector* provided forty-six days of perimeter security services around the three RCMP accommodation vessels in Burrard Inlet. Various security personnel were housed on cruise ships during the Olympic and Paralympic period and CCG provided on-water perimeter surveillance via random patrols. The

CCG Vessels and ACV at the Olympic Games in Vancouver

hovercraft *CCGS Siyay* provided five days of service in support of laying and retrieving buoys marking security zones, and another four days supporting the laying and retrieving of buoys to mark a clear channel through False Creek. One additional CCG Fast Rescue Craft, with additional crew, operated out of CCG Station Kitsilano as an enhancement to existing Search and Rescue (SAR) and other CCG operations.

Service delivery by the CCG in the Pacific Region, at the FOCOS, and the CCG National Co-ordination Centre (NCC) (both in Ottawa) as well as the Olympic Marine Operations Centre (OMOC) in Vancouver was significant and can only be considered a success, much like the Olympic and Paralympic Games in general. This experience will help improve safety and security for similar future events, such as the Pan-American and Para-Pan American Games, to be held in the Toronto area in 2015.

CCGS Sir Wilfred Grenfell, Offshore Patrol Vessel Testing its Firefighting Monitors

Fleet Performance

A total of 905 operational days were delivered in support of the MSET program in 2009-2010, representing 98% of planned time for the program. This number is higher than in past few years, mainly due to a change in how program activities are reported. The MSET program now has four dedicated vessels (up from three) - three in Central and Arctic Region and one in Quebec Region. This year's reporting also includes time in support of Maritime security aboard other CCG vessels.

Table 8: MSET Activities, 2009-2010 (# of Operational Days)

Maritime security assistance activities	455.02
Vessel Readiness	272.24
Other (e.g., inspection, transit)	88.46
General Support Activities	25.05
CCG Delays	38.65
Client Delays	15.55
Preparedness training and exercises	0.48
Awaiting Daylight	9.65
All Activities	**905.10**

Table 8a: Maritime Security - Support to the Vancouver 2010 Olympic Games, 2009-2010 (# of Operational Days)	
Delivered Days	**131.02**

In addition to the work performed for the MSET program, additional days for maritime security were delivered in support of the Vancouver 2010 Olympic and Paralympic Games. A total of 131 operational days, not including the additional SAR support that was provided, were delivered which accounted for 156% of planned time. Activities in support of the Olympic and Paralympic Games were completed before, during and after the Games, which was crucial in ensuring a strong maritime security presence.

2009-2010 Results

Provided support to multiple government departments during the Vancouver 2010 Olympic and Paralympic Games;

Worked with partners to acquire and install secure tactical communications on CCG ships in time for providing support to the security community for the 2010 Winter Olympic and Paralympic games. These and similar communications will also provide secure tactical radiocommunications in CCG's support to the enforcement community across Canada; and

Completed installation of Automatic Identification System equipment, a surveillance and identification system of vessels approaching and operating within our waters.

4.3 Environmental Response

It may be a messy job, but CCG steadfastly takes the lead in ensuring the cleanup of all ship-source and mystery spills into the marine environment in waters under Canadian jurisdiction. CCG also provides advisory services, technical support, and equipment for response purposes outside of Canadian waters when requested under international convention. CCG program personnel are on standby 24 hours a day, 7 days a week to investigate or initiate a response to pollution incident reports that are received regionally, nationally, and internationally: working with commercial partners to monitor and manage cleanup efforts. Canadian law holds polluters responsible for costs associated with cleaning up spills, including CCG's costs for monitoring and/or managing a response effort.

By its very nature, the Fleet's service to the Environmental Response program comprises mainly of responding to unplanned events and participating in training activities. In order to ensure that both Fleet and ER personnel are able and ready to effectively respond to a marine pollution incident or emergency, service planned for ER always includes days for training and exercises. This relationship supports the ship-specific competency profiles as prescribed by the Fleet Safety Manual under International Safety

Marc Thibault - Navigation Officer on the *CCGS Amundsen*

Management (ISM) and maintains the ER Programs' initial response posture critical for larger incidents. As is the case with planning, this year's report only includes the information for the large crafts and the ER activities they reported.

In 2009-2010, the Fleet was involved in several incidents which included standing by or escorting vessels, investigating spill reports in the marine environment or deploying response equipment. Given the size of Canada's coastline and the numerous types of vessels and transits, marine pollution incidents can vary in size and complexity. Reliance on the flexibility and expertise of our sea-going personnel remains the critical factor in resolving these incidents successfully.

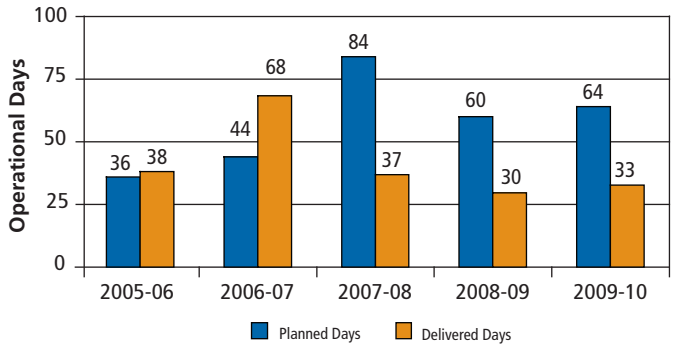
A potentially devastating incident was averted in September 2009 when *CCGS Des Groseilliers* stood by the disabled *M/V Avataq* while at anchor in Salluit, Nunavik, Quebec, until commercial tugs could arrive. Poor weather had caused the *M/V Avataq* to drag anchor to less than a half-nautical mile from shore and was at risk of causing a marine pollution incident by potentially going aground. Another environmental response was led by the *CCGS Harp* whose crew assisted in the clean-up of a spill from a fishing vessel in William's Harbour, Newfoundland and Labrador Region. And quick action by the crew of the *CCGS E.P. Le Quebecois* helped contain burnt debris as a result of a wharf fire at Mingan, Quebec.

Environmental Response Services Program Exercise

Fleet Performance

In 2009-2010, while 64 days were planned for ER, only 33 days were delivered. This is mainly due to a lack of vessel capacity to perform some of the planned ER training exercises. Of the service delivered, 1.5 days was for emergency preparedness and the remainder for ER related activities. 69% of service delivered was to carry out training and exercises related to the program, 26% for responding to incidents, and 5% for related tasks such as loading and unloading pollution equipment.

Graph 5: Service to Environmental Response, 2005-2006 to 2009-2010 (# of Operational Days)



Environmental Response Training on *CCGS Tanu*

Conducting spill response training aboard the ships recently provided ER personnel with an opportunity to become familiar with shipboard operations while providing the officers and crew an opportunity to receive training at sea. Last July, Daniel Reid, regional training officer for the CCG ER program in Pacific Region and Al Molenkamp, from CCG ER Victoria, joined *CCGS Tanu* at Port Hardy to provide basic oil spill response training while the ship was on SAR standby in the North Island/ Central Coast area. Specialized pollution countermeasure equipment including containment boom and an oil skimming system – normally staged at the Port Hardy SAR Lifeboat station – was loaded aboard the ship to provide the crew with a hands-on training opportunity.

Basic oil spill response training provides the officers and crew with the knowledge and skills required to safely and effectively participate in spill response operations. Spill volume estimation, booming techniques and skimmer operation are a few of the skills developed through the course. "*My time on Tanu has been a great learning experience for both me and the crew. Shipboard training is great as we can go directly from the classroom to the deck where participants can apply what they have learned. I look forward to doing more courses aboard fleet vessels in the near future,*" said Reid.

(Source: Shorelines, Vol. 13, Issue 1)

CCGS Tracy Approaching a Buoy on the St-Lawrence River, QC

4.4 Aids to Navigation

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

The Fleet supports this program by providing vessels and crews to place, lift, check, and maintain an extensive system of floating and fixed aids to navigation, both on water and on shore, and by carrying out surveying operations. A variety of large and small multitasked vessels and helicopters maintain this network. Some aids are required year-round, while seasonal aids are lifted out of the water for the winter season to prevent them from ice damage.

Seagoing personnel also deploy, recover, and maintain aids, verify the position and operation of floating aids, keep records of operations, update data on positions and characteristics of aids as required, and conduct maintenance on fixed and floating aids.

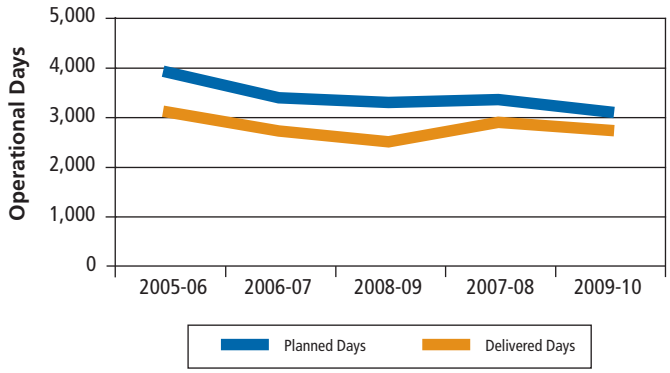
CCG's Aids to Navigation program continues to evolve in a world of technological change and now benefits from a lighting system relying almost exclusively on LED technology. In addition, where practical, buoys are now made of plastic, which reduces maintenance costs and should result in a reduction in the number of operational days dedicated to this service.

Fleet Performance

In 2009-2010, 2707 operational days were delivered in support of the Aids to Navigation program. As illustrated in Graph 6, from 2005-2006 to 2009-2010, both the planned days and the actual operational days are on a downward but converging trend. The decrease in planned days is driven by service efficiency improvements and the introduction of new technology. In this way, the Fleet Operations Plan reflects the required amount of time for each program in an effort to meet the target of 100% service delivery. Fleet delivered 88% of its planned service this year for this program, the highest service delivery rate in five years. As in past years, the majority of time spent on Aids to Navigation was in the Great Lakes - St. Lawrence Seaway area.

CCG Employees Performing Buoy Work

Graph 6: Service to Aids to Navigation, 2005-2006 to 2009-2010 (# of Operational Days)



4.5 Waterways Management

Canada's waters are bustling with activity, with more than 100,000 commercial vessel transits annually. Millions of recreational boaters also use our commercial waterways each year. Our Waterways Management program ensures vessels navigate safely and efficiently in our waters, helps protect our marine environment, and plays a crucial role in marine trade and commerce. The Waterways Services program sustains navigable channels in the Great Lakes and St. Lawrence Seaway, supports the work of the environmental protection and International Joint Commission in controlling water levels and flow volumes in the St. Lawrence River system.

Fleet Performance

Fleet provides support to this program using the *CCGS F.C.G. Smith* and *CCGS GC-03*, which are small twin-hull sounding vessels designed to conduct depth survey operations of the main shipping channel in the St-Lawrence River, usually between Isle-aux-Coudres and Montreal. These vessels are in

CCGS Terry Fox – Heavy Icebreaker, in the Arctic

service every year from spring break-up to the end of November. The graphs and tables pertaining to this program are included in the At-Sea Science section (4.8.1).

4.6 Icebreaking

CCG's icebreakers are its workhorses. They are on duty year-round, through Canada's two icebreaking seasons: December to April in the south - from the Great Lakes to the coasts of Newfoundland and Labrador - and June to November in the western, eastern, and high Arctic. After completing their winter season operations in May or June, seven icebreakers are deployed from the southern regions to the Arctic for the summer season. One icebreaker, the *CCGS Amundsen*, is dedicated to Arctic Science.

CCG's icebreaking and related services are crucial to the industry and to the Canadian economy, ensuring the safe passage of goods and people through ice-infested waters. The CCG responds to about 1,500 requests a year for icebreaking support, mainly to help commercial vessels conduct their trade. Working in partnership with Environment Canada's Canadian Ice Service (CIS), the Program 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;

- Re-supplying 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 by monitoring, preventing and breaking up ice jams.

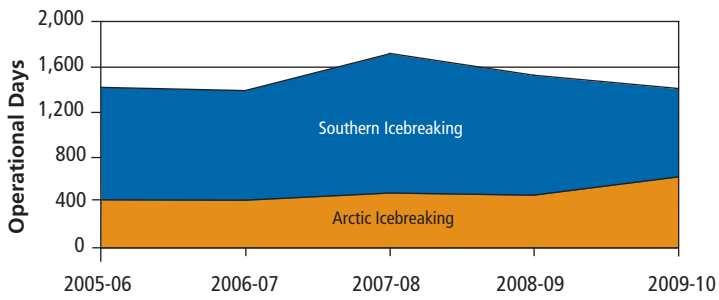
Icebreakers also carry helicopters that conduct ice reconnaissance flights and locate open water and leads for more efficient and effective icebreaking operations, as well as to provide general logistics support to the ship.

Fleet Performance

Due to a relatively mild winter, fewer days were required for icebreaking services in the South in 2009-2010, resulting in a decrease of 8% in services delivered to icebreaking as compared to 2008-2009. Planning for these services on an annual basis can be challenging, namely due to unpredictable winter ice conditions.

On the other hand, Arctic Icebreaking services required more time than planned. This led to an increase of approximately 163 days from last year. Although this may seem high, it can partially be explained by changes made in the reporting of program activities. Beginning in 2009-2010, pre-and post-arctic vessel mobilization and time transiting to and from the Canadian Arctic are now attributed to the icebreaking program. Taking these changes into consideration, the actual time spent on icebreaking operations in the Arctic is relatively consistent with the five year trend.

Graph 7: Service to Southern and Arctic Icebreaking, 2005-2006 to 2009-2010 (# of Operational Days)



4.6.1 CCG Fleet in the Arctic

CCG has a long and proud history of providing service in the Arctic and to Northern Canadians, and is playing an expanding role in Canada's Arctic. By its very presence, it is strengthening Canada's sovereignty throughout the country, particularly in the Arctic.

Sébastien Cadieux - Navigation Officer on the *CCGS Tracy*

From late June to mid-November, the Fleet operates seven icebreakers in the Arctic, with one icebreaker dedicated to Arctic Science. The Fleet's icebreakers are generally the first vessels to arrive in the region and the last to leave. Icebreakers escort commercial ships, breakout harbours, conduct SAR missions, respond to environmental concerns, manage aids to navigation, activate and de-activate communication towers, and support research, maritime security and Canadian sovereignty efforts. The Fleet's vessels and helicopters are often the only Government of Canada marine presence for thousands of miles. As such, they can be called upon to answer any pressing need in this often harsh environment. The presence of Canadian Coast Guard personnel and assets in Canada's North helps to protect and secure Canada's Arctic sovereignty, advance the government's Northern Strategy, and keep Arctic waterways open, safe, and clean.

Signs of climate change in the Arctic are becoming more apparent. Measurable shrinkage in the multi-year ice cover, shifting ice formations including increased movement and variability of dangerous multi-year ice, reduced summer ice extent in the summer and heightened inter-seasonal variability are making the demands for CCG services in the Arctic more frequent and more diverse. Typically CCG icebreakers are used by scientists to measure, explore, and study these changing Arctic ice conditions.

Over the last few years, Fleet has provided support to a number of Federal Government Arctic operations. For example, CCG is participating with several other Federal Government departments in the Canadian Forces-led "Operation Nanook", the largest northern operation to exercise Arctic sovereignty and exercise preparedness for missions such as humanitarian and environmental emergencies in northern Canadian communities. Additionally, as part of the United Nations Convention on the Law of the Sea (UNCLOS) ratification process, Fleet is supporting a Geological Survey of Canada (GSC/NRCan), Canadian Hydrographic Service (DFO), and Department of Foreign Affairs and International Trade (DFAIT) joint initiative to gather data and develop seismic/bathymetric survey plans, in the Arctic Ocean, in order to delimit the boundary so as to gain international binding agreement on the boundary to which our current rights extend.

In August 2009, Bill C-3, *An Act to Amend the Arctic Waters Pollution Prevention Act*, received royal assent, extending Canada's jurisdiction to enforce environmental laws and shipping regulations up to 200 nautical miles from its shores in Arctic waters. This in effect doubles the previous area of jurisdiction, meaning that CCG may have to adjust its efforts and increase support as needed.

Pierre Asselin - Engineering Officer on the *CCGS Tracy*

Throughout 2009-2010, CCG continued to make progress on the polar icebreaker project, including the completion of the mission profile, stakeholder consultations, and validation of the vessel's operational requirements. Conceptual design work is currently ongoing, with delivery scheduled for 2017.

2009-2010 Results

Continued to provide icebreaker support to Government of Canada science priorities related to Canada's obligations regarding seabed mapping associated with the United Nations Convention on the Law of the Sea (UNCLOS); and

Continued to make progress on the polar icebreaker project, with delivery of the vessel planned for 2017.

Canada – United States Collaboration in the High Arctic

Since 2006, Natural Resources Canada (NRCan) has been a client of Canadian Coast Guard – Fleet, utilizing heavy icebreaker ship time to carry out the required bathymetric and seismic research required to delineate the outer limits of the continental shelf in Canada's Arctic. A project with national significance, NRCan's submission to the UNCLOS Commission will help confirm the full extent of the area over which Canada has sovereign rights. This sovereignty is a major piece of the Government of Canada's Northern Strategy and could give Canada rights to the resources both on and below the seabed in the defined area.

In 2009-2010, the *CCGS Louis S. St-Laurent* once again completed a 42 day mission in the Beaufort Sea which enabled NRCan scientists to collect another season's worth of seismic and bathymetric data. This mission represents the continuation of a collaborative program which has been in place between Canada and the United States since 2008 whereby both countries simultaneously collect mutually-beneficial data. During 2009 Arctic Operations season, the Louis completed its second mission in partnership with the United States Coast Guard Cutter *Healy (WAGB-20)*. The amount and quality of the data collected was outstanding according to the scientists. The mission exceeded the planned amount of data collection and the ships surpassed mission objectives.

The *Louis* and *Healy* met up on August 12, and the *Healy* took the lead as the icebreaker in the Beaufort Sea, escorting the *Louis* as its crew conducted seismic surveys to help determine the composition of the seabed. On August 27, the roles were reversed. On September 6, the *Louis* and *Healy* completed the joint operations portion of the 2009 UNCLOS survey and the *Louis* continued with seismic work for the program until September 12.

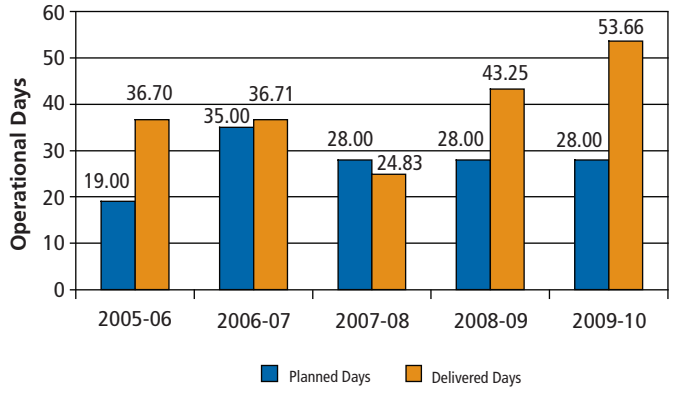
(Submitted by Renee Pope, NL Region with acknowledgement to Commanding Officers McNeil and Rothwell for input provided from the 2009 LSSL Arctic Voyage Report)

Officer on Duty in a NL Region MCTS Centre

4.7 Marine Communications and Traffic Services

The Marine Communications and Traffic Services program (MCTS) provides maritime distress and safety communications, conducts vessel screenings, regulates vessel traffic movement and provides information systems and public correspondence on a 24/7 basis.

Graph 8: Service to MCTS, 2005-2006 to 2009-2010 (# of Operational Days)



This service is delivered through a network of 22 centres supported by a network of communications towers across Canada.

Fleet Performance

In 2009-2010, some 54 operational days were delivered in support of MCTS. While the Fleet's involvement in MCTS is generally limited, each year activities must be planned in the Pacific Region to service fourteen of the region's remote sites on the Queen Charlotte Islands and central coast areas that are only accessible by helicopter. While MCTS activities were exclusively planned for the *CCGS Sir Wilfrid Laurier* in the Pacific Region, vessels from Newfoundland and Labrador, Central and Arctic, and Quebec regions also completed activities related to maintaining coastal radio systems, and remote communications site activation/deactivation accounting for an additional 23 operational days for MCTS. While it is common to see actual operational days exceed the amount of planned days, this year Pacific Region delivered 111% (31 days) of its planned

services, which is the highest service delivery rate in the past five years (see Graph 8). This is due to additional unplanned support activities carried out by other vessels in the region, and the *Sir Wilfrid Laurier's* five day delay due to weather.

4.8 Department of Fisheries and Oceans

In addition to fulfilling its primary commitment to marine safety and environmental response, the CCG Fleet plays a crucial role in fulfilling the mandate of the Department of Fisheries and Oceans. Scientists conducting hydrographic, oceanographic, and scientific research are hosted aboard CCG vessels. Specialized crews support them in their work. While science-related activities are conducted on many of our multi-taskable vessels, 17 of our vessels are dedicated solely to the scientific endeavours of DFO and other organizations.

4.8.1 At-Sea Science

The Fleet supports DFO's At-Sea Science Program by providing trained crews on board both specialized and multitasked vessels. These include research trawlers, fishing vessels, hydrographic survey vessels, oceanographic vessels and icebreakers.

As previously mentioned, Canadian Coast Guard icebreakers, such as the flagship *CCGS Louis S. St-Laurent*, support Canadian and Canadian-led international marine research projects in the Arctic. These tasks are carried out during CCG's regular annual Arctic deployment in support of icebreaking for commercial shipping and northern resupply. The icebreaker *CCGS Amundsen* also supported

David Morse, Ann Miller, and Captain Smith Onboard the *CCGS Hudson*, Offshore Oceanographic Science Vessel

CCGS Samuel Risley, Medium-Endurance Multi-tasked Vessel Working on Lake Erie, ON

the ArcticNet science mission led by Université Laval researchers, reverting to its standard icebreaking duties in the estuary and the Gulf of St. Lawrence in the winter months.

The Fleet's crews support scientists and technicians in a variety of specialized areas such as:

- Fishing for research purposes for a variety of commercial fisheries species;
- Conducting surveys on acoustics, hydrography, geophysics, marine species stock assessment, and benthic habitats and organisms;
- Conducting marine mammal and seabird enumeration, identification, tracking, and bioassessment;
- Collecting plankton, larvae and phytoplankton;
- Collecting water samples for marine chemistry studies;
- Taking bottom sediment samples and coring;
- Collecting data verifying empirical models for water mass structure and circulation, currents and tidal propagation, and prediction; and
- Conducting remote camera studies of benthic habitats and organisms.

The data collected contributes to a more comprehensive record of life in the area, and can be used to measure the impact of climate change, fishing or oil and gas activity in our waters.

Fleet Performance

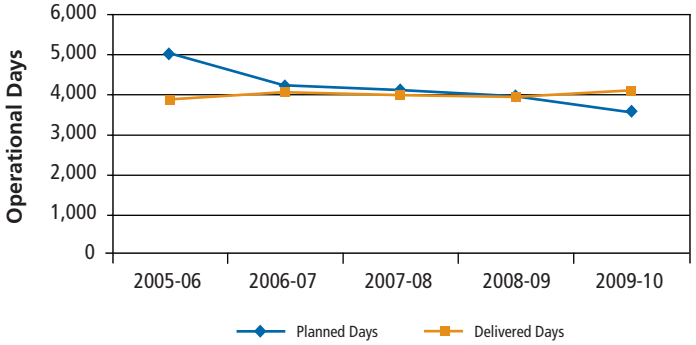
From 2005-2006 to 2009-2010, planned service to DFO Science (including Waterways Management activities) has trended downwards. Actual service delivered, meanwhile, is on the rise and has now surpassed the trend line for planned days.

As Graph 9 indicates, the Fleet delivered more days than planned to DFO Science in 2009-2010. Vessel operational availability improved in 2009-2010 in comparison to previous years, translating into a relatively higher degree of success for the completion of Science programs. Contributing factors include the heightened reliability of vessels following major refit periods and the use of replacement vessels when regular Science vessels were unavailable due to unplanned maintenance or extended refit.

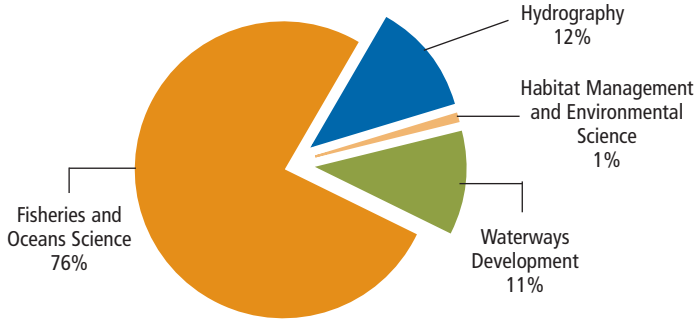
Additionally, at the beginning of 2009-2010, the Fleet entered into new Service Level Agreements (SLAs) with DFO Science to ensure a more structured basis for the delivery of the DFO At-Sea Science program. Every effort was also made to ensure that in-year changes to the original plan and ad-hoc requests by the client were met, acting as a driver for the increase in service delivered over the course of this fiscal year.

As illustrated in Graph 10, most of the time delivered to DFO Science in 2009-2010, was for scientific research conducted by DFO Scientists (76%), followed by services to Hydrography (12%), Waterways Management (11%), and Habitat Management and Environmental Science (1%).

Graph 9: Service to DFO Science, 2005-2006 to 2009-2010 (# of Operational Days)



Graph 10: Service to DFO Science by Activity, 2009-2010 (% of Total Operational Days)



Bayfield Institute at the Canadian Centre for Inland Waters

The Canadian Centre for Inland Waters, located in Burlington, Ontario, is home to Fisheries and Oceans Canada's Bayfield Institute, a key centre for research in aquatic biology, freshwater fisheries and navigational charting. In conjunction with DFO's Freshwater Institute in Winnipeg, Manitoba, and the Sea Lamprey Control Centre in Sault Ste. Marie, Ontario, the Bayfield Institute serves as a hub of scientific research in the Central and Arctic Region.

The Canadian Coast Guard Fleet plays an important role at the Bayfield Institute. It provides specially-equipped vessels and launch support to the Science research programs and Canadian Hydrographic Service surveys carried out by the institute's staff. Repair and maintenance of the smaller fleet vessels is also carried out in the marine workshop at the Institute.

4.8.2 Ecosystems and Fisheries Management

The Fleet supports Ecosystems and Fisheries Management (EFM), formerly known as Fisheries and Aquaculture Management (FAM), by carrying out enforcement and surveillance activities in Canadian waters for the Conservation and Protection Program. The Fleet also provides an enhanced presence at sea in the regulatory areas of the Northwest Atlantic Fisheries Organization (NAFO) in order to help stop illegal fishing by foreign fleets in the 282,500 km2 Grand Banks of Newfoundland and in international waters.

CCG Fisheries patrol vessels, including armed vessels with armed CCG personnel, are used in the near-shore and offshore areas of Canada. Multitasked vessels with helicopter support are also provided as required. CCG maritime professionals support fisheries officers in performing enforcement duties, including:

- Monitoring and patrolling vast areas of coastline and providing a federal presence in Canadian waters, thereby deterring threats and illegal activities;
- Helping ensure compliance with Canadian laws in Canadian jurisdictions;
- Supporting fisheries interdiction activities;
- Patrolling closed and boundary areas and conducting inspections at sea;
- Serving as a command platform and secure communications hub for C&P enforcement activity;
- Conducting general and covert surveillance and monitoring various fisheries;
- Recovering, seizing, and storing and transporting illegal fishing gear; and

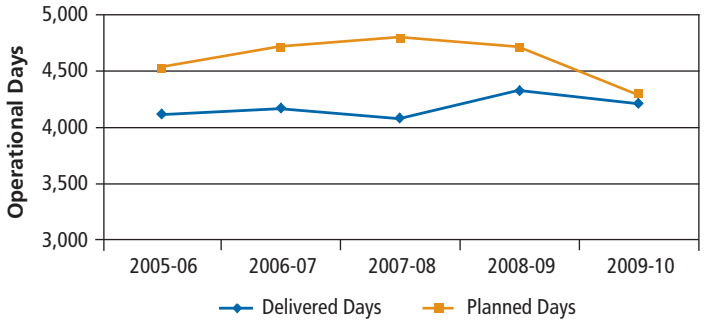
Lucie Lefrançois - Navigation Officer on the *CCGS Amundsen*

- Checking licences, logbooks, catch and fishing gear, including inspections of fixed and mobile gear types, and disclosure of poaching and/or other means of illegal fishing.

Fleet Performance

In 2009-2010, some 4198 days were delivered in support of the EFM program. Approximately 98% of planned days were delivered, a 6.3% year over year increase in service delivery. This makes 2009-2010 the year with the highest percentage of service delivery for this program in more than five years. As shown in Graph 11, the actual number of operational days delivered to EFM has been fairly consistent over the past five years; however the number of planned days requested by the client decreased in 2009-2010. The decrease in the number of planned days in the Fleet operations plan is the primary reason for this year's successful delivery rate and shows that EFM is continuing towards a converging trend in service delivery.

Graph 11: Service to EFM, 2005-2006 to 2009-2010 (% of Operational Days Delivered Compared to Planned Days)



As Table 9 indicates, 58.1% of delivered time was spent patrolling in Canadian waters and 29.8% in NAFO regulatory areas. This is consistent with the delivery of EFM activities over the past five years.

Table 9: EFM Activities, 2009-2010

	Number of Operational Days (#)	Percentage of Total Operational Days (%)
Patrolling in Canadian waters	2439.46	58.1%
NAFO patrols	1249.48	29.8%
Resource management	267.10	6.4%
Other patrolling	216.60	5.2%
Administrative	21.68	0.5%
Aboriginal fisheries	2.59	0.1%
Patrolling in international waters*	1.49	0.0%
Total	**4198.40**	**100.0%**

* Patrols off the Pacific and East Coasts (excluding NAFO areas).

CCGS Vakta, a Specialty Vessel with a Fast Rescue Craft

4.9 Other Government Departments and Agencies

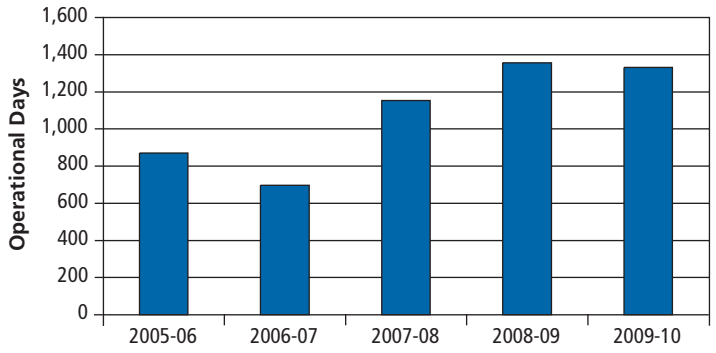
The CCG Fleet is also responsible for on-water operations (vessels, helicopters, expertise, personnel, and infrastructure) for the benefit of other federal government departments and agencies pertaining to their specific maritime priorities. These include the Natural Sciences and Engineering Research Council, Environment Canada, Natural Resources Canada, the Department of National Defence, the Department of Foreign Affairs and International Trade, and Transport Canada.

Client requirements, missions, and operational profiles dictate the type of support needed. For example, Environment Canada, the Natural Sciences and Engineering Research Council and Natural Resources Canada require specifically designed scientific vessels to support their activities.

Fleet Performance

During 2009-2010, 1331 operational days were delivered in support of other federal government departments and agencies (OGDs). As Graph 12 indicates, this is consistent with last year's service delivery to OGDs. That being said, service delivery has increased by nearly 25% since 2008-2009, for a service delivery rate of 150%. This can be explained by the continued and increasing demand for Fleet resources for special projects such as United Nations Convention of the Limits of the Continental Shelf (UNCLOS), ArcticNet, International Polar Year (IPY), and in-year ad-hoc requests from various OGD clients. Some changes in reporting also account for this change.

Graph 12: Service to OGDs, 2005-2006 to 2009-2010 (# of Operational Days)



CCGS Henry Larsen and a Canadian Navy Ship Working Together

5 MEASURING PERFORMANCE... SAFETY, SECURITY, EFFECTIVENESS, AND EFFICIENCY

In all its activities in support of client or Canadian interests, the Canadian Coast Guard Fleet's goal is to provide services in a safe, secure, effective, and efficient manner.

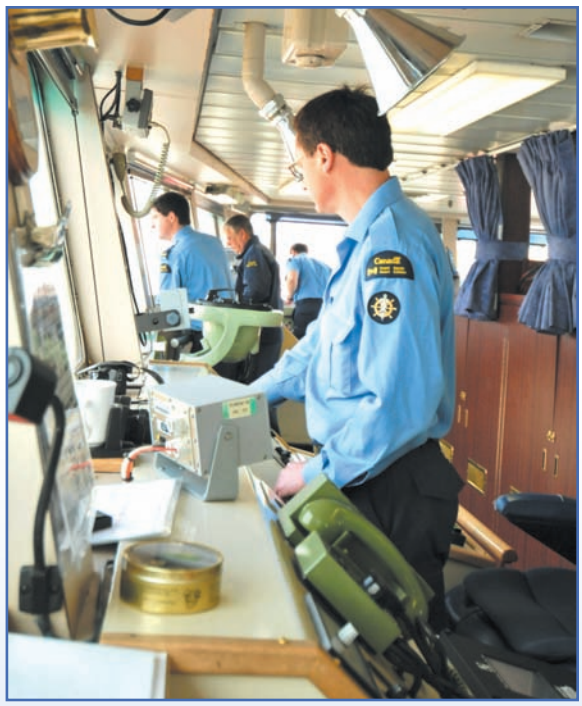
While Section 4 examined services by client, Section 5 looks at the Fleet's accountability and overall performance, with measures endorsed by the Fleet Executive Board. This board is the Fleet's management and governance board, consisting of the Headquarters' Fleet Directors and the Regional Directors, Fleet, and is led by the Director General, Fleet.

As new evaluation criteria and factors are required, performance measures will evolve to ensure that the Fleet has the most meaningful, timely, and accurate information on which to base decisions and report to Canadians.

5.1 Accountability

The Canadian Coast Guard Fleet is managed through a clear national accountability structure based on the principles of openness, transparency, and national consistency. The Fleet Executive Board, chaired by the Fleet's Director General, is accountable for promoting national consistency and leadership in the management of the Fleet and its personnel in such matters as safety, security, planning, financial management,

CCGS Cap Tourmente, SAR Lifeboat, During an Exercise



Wheelhouse on *CCGS Griffon* - C&A

human resources, performance, and vessels and helicopter operations. The Fleet Executive Board convenes regularly to make decisions and recommendations regarding operations, policy setting and planning, and to resolve national issues.

The Fleet's Regional Directors report to their respective regional Assistant Commissioners, who in turn report to the Commissioner. Fleet Regional Directors, through their Assistant Commissioners, are accountable for the Fleet's day-to-day operations, program delivery and associated financial, safety, security, and operational management of the Fleet and its personnel on a regional basis.

Since sound decisions require accurate, timely, and comprehensive information, CCG Fleet will continue to invest in the improvement of its information management systems. These systems are critical for decision-making, planning, measuring performance, and reporting at all levels of management and to the public. The Fleet Activity Information System (FAIS) is in the process of being replaced with iFleet, a system that will enhance the capture of Fleet vessels' activities on an hourly basis to provide quick and accurate information to all levels of management.

2009-2010 Results

Completed architecture design for iFleet upgrade project;

Published and maintained the evergreen Intranet-based Fleet Management E-Manual; and

Developed an Environmental Management Framework for internal operations to establish the principles and considerations necessary to begin addressing requirements for reducing emissions as well as other greening of government initiatives.

Accountability to Canadians and Program Clients

The Fleet is accountable for the ongoing provision of services primarily through the execution and delivery of the Fleet Operations Plan. Accountability for the Fleet's overall management is governed by the Canadian Coast Guard's three-year Business Plan, which includes accountability for delivery on the priorities of CCG with regards to enhancing services, supporting people and maximizing efficiency.

Table 10 outlines the priorities identified in the Business Plan as well as the activities conducted throughout the year in support of these priorities. This information is also reported in the 2009–2010 Business Plan Mid-Year Review and Year-End Report. These reports are available at: **http://www.ccg-gcc.gc.ca/eng/CCG/Publications**.

Table 10: The Fleet's Commitments and Achievements, 2009-2010

Commitment	What was Achieved
CCG Business Plan Priority: Improving Client Service (Service Level Agreements with DFO Clients)	
Implement Service Level Agreements with Science and Ecosystems and Fisheries Management as a three year pilot, and review and improve performance measures.	Service Level Agreements (SLA) were signed in April 2009 with DFO Ecosystems and Fisheries Management and Science. Funding transfers have taken place and first quarterly report to Science and Ecosystems and Fisheries Management clients was provided, as planned. Quarterly meetings were held at the DG level with both sectors as per SLA. Ongoing improvements have been incorporated and reporting quality has improved. A comprehensive year-end quantitative and qualitative report was developed.
CCG Business Plan Priority: Effective Management of Our Workforce and Workplace (Recruitment and Diversity)	
Ensure the Operational Women's Network is fully engaged.	The Operational Women's Network is officially included as a sub-committee of the Fleet Executive Board. Website with communications protocols for members is being developed.
CCG Business Plan Priority: Key Initiatives - Ongoing Services (Ongoing Improvements in Fleet Management)	
Complete architecture design for Fleet Activity Information System (iFleet) upgrade project.	The Project is on budget and on schedule.
Revise the Fleet Renewal Plan.	CCG has consulted extensively within DFO and with other government departments and Central Agencies in revising and updating its Fleet Renewal Plan. CCG will continue to develop the Plan in line with Government direction. Federal Budget 2010 provided $27.3M for the replacement of an Air Cushioned Vessel (ACV) for the Pacific Region.
Publish and maintain an intranet-based Fleet Management E-Manual.	The E-manual is published and on-line. It will be maintained on a regular basis as an evergreen document.
Finalize standardized crewing matrix predicated on competency (crewing) profiles.	All Ship Profiles have been finalized and posted on CCG vessels. Work is progressing on the crewing profiles during maintenance/refit periods.
CCG Business Plan Priority: Key Initiatives - Ongoing Services (Fleet Human Resources Initiatives)	
Initiate research on vision standards for seagoing personnel.	Marine Personnel Branch is working with Transport Canada to incorporate CCG requirements into the new TC-led national standard for Canadian seafarers. An action plan to address Bona Fide Occupational Requirements for vision for seagoing positions that are linked to national and international regulatory requirements will be implemented in FY2010-2011.
Develop a Ships' Crew Certification Program.	Completed the development of requirements in the Engine Room and Navigation streams for Ships' Crew to become Ships' Officers. The development of detailed syllabi for each of the specific certificates modules and the implementation of the Ships' Crew Certification Program will be initiated in FY2010-2011.

Legend

- The project or deliverables were completed as planned and/or decision/approval was obtained by April 30, 2010
- The project or deliverables were not completed as planned due to external factors, or substantial progress has been made but the project or deliverables were no fully completed by April 30, 2010.
- The project or deliverables are substantially incomplete.

5.2 Safe and Secure Delivery

The Fleet operates in a high-risk environment. Our vessels, air cushion vehicles, and helicopters conduct operations in some of the world's most remote locations under extreme environmental conditions. Despite these challenges, the Fleet remains committed to safety, security, and environmental protection in the delivery of quality services to its clients. The safety and security of seagoing personnel, supernumeraries, support staff, scientists, and contractors is paramount.

As an organization, the Fleet manages risk through the Safety and Security Management System (SSMS). A total of 25 full-time employees work with seagoing and shore-based Fleet personnel to promote a culture that puts safety and security first on a daily basis. This "culture of safety" includes a comprehensive system of audits conducted onboard all Fleet vessels to monitor the results of incidents, and mitigation policies and systems procedures to protect employees. Fleet employees conduct audits to ensure continuity and monitor the effectiveness of the overall program, and this has improved the sharing of SSMS best practices. We are currently working on implementation of the CCG Fleet auditors' competency improvements, qualifications standards, and training program, to be completed in 2010-11. In addition to supporting succession planning, this initiative will ensure standardized audits using best practices across Canada.

The Canadian Coast Guard and the Fleet are committed to providing and maintaining a work environment that complies with and exceeds regulatory health and safety requirements. The Fleet strives to protect employees from hazards which could result in injury, illness, or loss or damage to property. As a result of this commitment, once a real or potential safety deficiency has been identified or new regulations or standards come into

SAR Exercise

force, Fleet Safety and Security develops or updates policies and procedures to reflect best practices. This ensures the Canadian Coast Guard Fleet remains a safe and dynamic learning organization.

An example of the Fleet's adoption of a best practice based on a recently published industry standard is the ongoing implementation of the Respiratory Protection Program (RPP). At times, Fleet personnel may come into contact with airborne hazardous particles such as when removing old paint or, in extreme situations, when fighting a fire onboard their vessels. To ensure employee safety, the RPP requires that all seagoing employees wear respiratory protective devices when undertaking certain tasks, and not just during firefighting and emergencies. The Respiratory Protection Program will ensure that all seagoing employees know how to care for and use respiratory equipment and have been properly fit-tested to wear the required device. The Respiratory Protection Program is expected to be fully implemented by October 2010.

Coast Guard SAR Team


Coast Guard Ship at Sea

CCG Fleet is also putting measures in place to ensure more effective small craft operations and training oversight. Small Vessel Operator Proficiency Training and Rigid Hull Inflatable Operators' Training was issued in 2008 and re-issued in 2010. A Curriculum Advisory Group including CCG Auxiliary participation ensures training is kept current. The Fleet continues to investigate a proposal for standardization of CCG small craft training delivery for Eastern Canada.

To reduce risks to Auxiliarists during operations with and for the Canadian Coast Guard, agreements are in place with Fleet experts to attend the regional and national meetings of the Auxiliary. The Auxiliary now participate on the Operational Support's Curriculum Advisory Group on small craft training.

CCG Fleet fosters a culture of safety in the workplace that extends well beyond simply complying with regulations. Employees take part in safety training and awareness sessions, contribute to external and internal audits and provide valuable insight regarding the continuous development and improvement of

safety policies, guidelines, and procedures. Creating, maintaining and promoting a safe and secure workplace aboard all our vessels assures clients and Canadians of the Fleet's overall operational readiness.

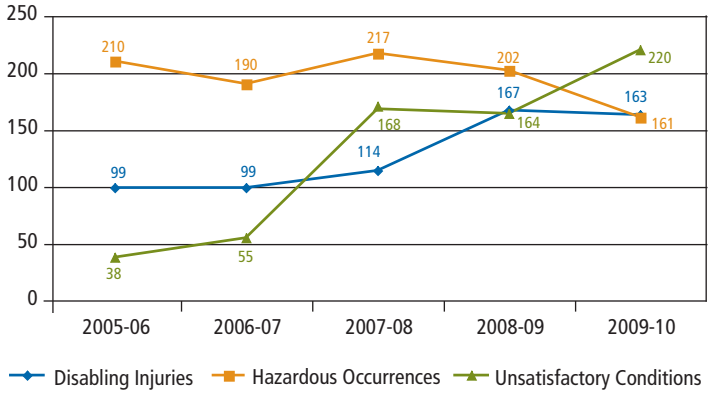
In 2009–2010, 132 audits were completed and 34 new ship security officers were certified under the SSMS. Fleet Safety and Security also tracked each reported shipboard incident. As Graph 13 illustrates, there was a 2% increase in the number of reported incidents in 2009-10. Reported incidents include disabling injuries, hazardous occurrences and unsatisfactory conditions.

While no major incidents were reported in 2009-2010, the number of reported unsatisfactory conditions (a situation that is not a safety incident but could potentially evolve into one) increased by 34% from 2008-2009. This increase is attributed to greater awareness of reporting requirements and the establishment of a more rigorous vessel maintenance management program as well as the inclusion of the small vessel fleet into the SSMS. The number of hazardous occurrences, however, has decreased by 20% in 2009-2010, which can be attributed to employees' increasingly proactive attitude when dealing with safety issues.

Mission Readiness Framework

Centralized coordination is crucial to the Fleet's quick response during unforeseen events, helping ensure the safety of our personnel and of others who may be at risk. Prompt and accurate information, clear guidelines and established operating procedures are essential decision-making support tools that often affect the outcome of difficult or unusual situations.

Graph 13: Trend of Reported Incidents, 2005-2006 to 2009-2010



Developed in the wake of our Hurricane Katrina relief efforts in 2004–2005, the Fleet's Mission Readiness Framework allows us to respond in a more systematic way to unpredictable events or unplanned requests for urgent support. The framework provides strategies and protocols to deal with changes in normal operating circumstances, whether they are environmental (e.g. storms, ice conditions, floods), hardware-related (e.g. technical breakdowns, accidents) or human (e.g. security threats, public health emergencies, illnesses) in nature.

As part of the Mission Readiness Framework, daily briefings to senior management at CCG Headquarters and readiness response profiles help the Fleet plan for a faster, better-coordinated response. These activities and others help ensure that mission readiness and the culture of safety are codified and remain part of the Fleet's core principles.

H1N1 Pandemic

During the summer of 2009, increased attention was given to the approaching flu season and the H1N1 influenza virus. Early reports indicated the possibility of a larger infection rate among Canadians. In preparation, the Fleet reviewed all available information on influenza and on the H1N1 virus and began incorporating the latest medical guidelines and illness prevention practices into its preparedness efforts. Through an arranged specific services contract, the Fleet ensured that Commanding Officers could consult with on-duty physicians should they need medical advice while at sea. Medical practitioners reviewed and amended the Fleet's pharmaceutical list and personal protective equipment stocks were supplemented. The Fleet also prepared an infectious diseases framework to cover a variety of scenarios that could play out aboard its vessels. Similarly, shore-based personnel received guidance from the Department of Fisheries and Oceans' Safety, Security and Real Property Directorate.

Whether dealing with the flu or a gastro-intestinal illness aboard our ships, the general steps Fleet personnel must take to prevent, contain, treat, and recover from infectious diseases in confined quarters are similar. These practices are now being incorporated into normal shipboard operations. Loss of Fleet readiness to H1N1 was negligible thanks in part to combined efforts aiming to reduce the spread of the virus.

CCG Fast Rescue Craft and a US Coast Guard Dauphin Helicopter during a SAR Exercise

Improvements to CCG

Following the capsizing of the fishing vessel *L'Acadien II* while under tow by a Canadian Coast Guard icebreaker in March 2008, CCG formed a dedicated team to support the independent investigation into this incident and analyze the recommendations offered in all reports on this incident. In 2009-2010, CCG implemented several recommendations contained in the action plan developed in response to reports on this tragic incident. These include:

Towing Procedures

- A literature review on towing operations, ice operations, and specifically towing in ice, conducted by Dalhousie University's Marine Activity and Risk Investigation Network;
- A draft integrated CCG Assistance to Disabled Vessels Policy, produced and posted on the Internet in March 2010 for public consultation;
- A Memorial University study and tank tests on towing dynamics in ice; and
- Technical research.

Small Craft Training

- The development of enhanced documentation practices, for example:
  - Small craft training will be enhanced by better safety audits, better planning, and better record-keeping that is now included in the Safety Management System audit plan;
  - In December 2009, an initial internal audit of the Bamfield small craft training centre of expertise was conducted by CCG Fleet Safety and Security, with good results. An external audit of this facility is scheduled for November 2010;
  - Contingency planning guidance was issued as an Operational Risk procedure under the Fleet Safety and Security Manual; and
  - A Fleet Circular (08-2009) on Audio and Visual Recording of Training, Exercises and Operations was issued in September 2009.

Coast Guard Air Cushion Vehicle Entering the Water

2009–2010 Results
Developed material related to Fleet Safety and Security System for new employees;
Prior to the H1N1 pandemic, published a readiness plan including procedures for the prevention and response to pandemics onboard vessels so as to mitigate potential impact on Fleet readiness;
Continued implementation of the National Respiratory Protection Program, based on the Canadian Standards Association standard to reduce exposure to contaminants through improved ventilation, enclosure or isolation, or by substituting a less-hazardous process or material, and providing personal protective respiratory gear when needed;
Included the Hearing in Noise Test (HINT) and the Source Azimuth in Noise Test (SAINT) in periodic medical evaluations administered to all CCG seagoing employees. These tests provide an objective and accurate assessment of individuals' capability to hear in noisy environments associated with vessel operations;
Implemented several recommendations contained in the action plan developed in response to reports of the *L'Acadien II* incident;
Integrated the Canadian Coast Guard College under the governance of the SSMS, with a view to full integration of the SSMS into the Canadian Coast Guard course curriculum and small craft training facilities;
Initiated a pilot project for the prevention of injuries through data analysis and ergonomic assessment in Newfoundland and Labrador Region to analyze the root causes of incidents and to develop an injury-prevention program;
Initiated discussions with unions and senior management to implement a safety, security and environmental compliance management system within the Canadian Coast Guard;
Reviewed CCG emergency communications protocols related to emergency situations to provide recommendations for improvements; and
Documented SSMS requirements to further enhance the system for newly built vessels.

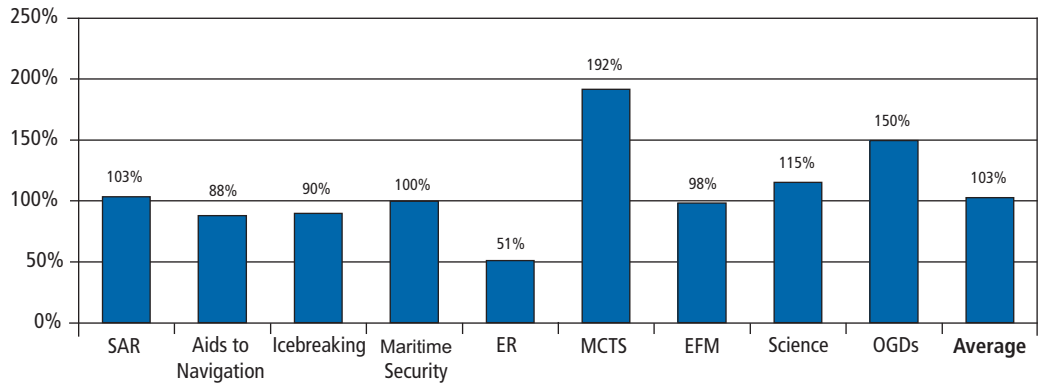
5.3 Effective Delivery

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

By comparing the service delivered to what had been planned for 2009–2010, the Fleet can gauge the effectiveness of its service delivery. Where values exceed 100%, service demands were actually higher than anticipated. Consequently, more operational days were delivered. Where values are below 100%, fewer operational days were delivered than had been planned. The normal tolerance range is plus or minus 10%, given operational, environmental and program fluidity.

As Graph 14 illustrates, an average of 103% of service planned was delivered across all Fleet clients in 2009-2010. While this represents an increase of 6% since 2006-2007, there have been major variances in certain individual program delivery rates since that time. Services delivered to the SAR, Icebreaking, Maritime Security, and EFM programs are all within the tolerance range. Following closely within the acceptable ranges are Aids to Navigation and Science. Environmental Response services delivered only 55% of its planned services

Graph 14: Service Delivered versus Service Planned by Fleet Clients, 2009-2010 (%)

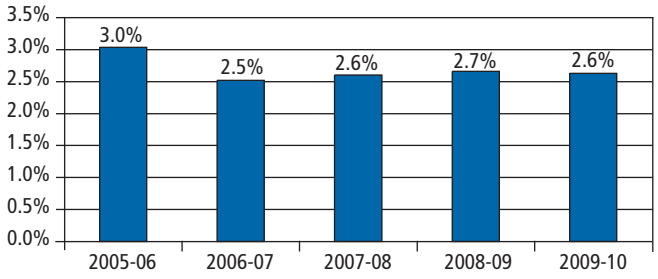


while service delivered to OGDs and MCTS reached an all-time high of 150% and 192% respectively. Additional details on the service delivery of each individual program are included in Section 4.

Another means of assessing fleet effectiveness is through operational delays. This measures the amount of time a vessel is available but experiencing delays due to factors such as weather, waiting for equipment or personnel, equipment breakdown or for administrative reasons.

Graph 15 shows that in 2009-2010, a total of 821 operational days were lost due to delays. Of these days, 66% (546) were lost due to weather, ice and tidal conditions. This is consistent with the five year trend showing weather-related conditions to be the main cause of operational delays. As has also been the trend over the past five years, the three programs most often affected by delays are EFM (42% average), Science (25% average), and Aids to Navigation (19% average).

Graph 15: Service Time Lost Due to Delays, 2005-2006 to 2009-2010 (% of Total Operational Days)



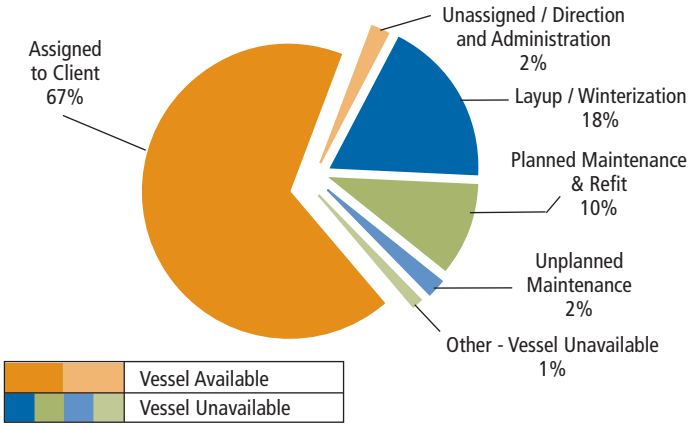
Launching a Fast Rescue Craft

Coast Guard SAR Fast Rescue Craft

5.4 Efficient Delivery

If effectiveness is the extent to which the Fleet is meeting expected results, efficiency is about how well it uses its time and resources in order to do so. The Fleet uses vessel availability and multitasking as performance measures to determine how efficiently it delivers services to clients.

Graph 16: Utilization of Vessels by Operational State, 2009-2010



At any given time, a vessel is either available or unavailable for operations. When a vessel is available, it can be assigned to a client (e.g. SAR, EFM, icebreaking, Aids to Navigation, amongst others), multi-tasked, engaged in administrative or other tasks such as community and visitor relation activities, or simply unassigned. When conditions dictate that a vessel is unavailable due to winterization, layup due to lack of funds or its extended refit or maintenance, for example it cannot be tasked to client operations.

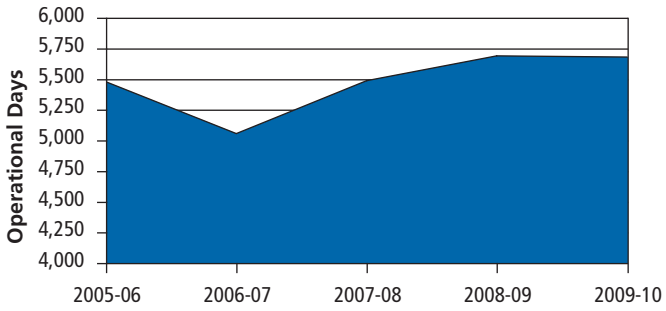
As Graph 16 indicates, the Fleet spent 67% of the total time in 2009-2010 (all operational states) assigned to clients. In other words, Fleet used 97% of its planned operational time to provide client services. This is a slight increase of 2% since last year. The majority of the remaining time was spent in layup/ winterization (18%) or maintenance (12%), followed by direction and administration (2%), and other activities (1%).

In 2009-2010, vessels spent a total of 5681 days in both planned and unplanned maintenance. While this overall total is relatively the same as the previous year, the number of planned and unplanned days have changed. 2009-2010 noted a decrease of 60 days in planned maintenance and an increase of 52 days of unplanned maintenance/breakdowns. Unfortunately, unplanned breakdowns are impossible to avoid, causing an average 3% of lost operational time.

As illustrated in Graph 17, the increased amount of time vessels are unavailable due to maintenance or refit can be explained by the fact that older vessels require more care and maintenance. As a result, more resources and planned maintenance time is dedicated to the Fleet's most at-risk vessels in an effort to maintain and stabilize current availability levels.

The second relative measure of efficiency is multitasking. Simultaneous missions for a variety of clients can often be conducted by one vessel, within the constraints of geography, time, availability and capability. Icebreakers, for example, can provide a number of other services while conducting their primary operations. This could include environmental monitoring and/response, search and rescue coverage, or observe, report and record functions for maritime security.

Graph 17: Vessels Not Available Time Due to Maintenance/Refit, 2005-2006 to 2009-2010 (# of Operational Days)



In 2009-2010, the Fleet Operations Plan scheduled 5.9% of operational days to be spent in multitasking activities. This target was exceeded, however, as the Fleet actually ended up being multitasked 10.7% of the time. While the time spent multitasking was nearly double from what was planned, both the planned and delivered multitasked days (Table 12) indicate a downward trend over the past five years that is taking us further away from the ultimate goal of a 15% multitasked fleet. This trend could be attributed to the continuing demand for dedicated program missions onboard certain vessels (especially in the Arctic such as the UNCLOS and ArcticNet programs) that do not allow for multitasking, and to the increase in unplanned breakdowns. Unplanned

Table 11: Multitasking Trend, 2005-2006 to 2009-2010 (%)

	% Planned	% Delivered
2005-2006	17.3%	13.9%
2006-2007	16.5%	13.8%
2007-2008	7.2%	12.3%
2008-2009	7.2%	11.7%
2009-2010	5.9%	10.7%

breakdowns of certain vessels can reduce time spent in multitasking activities, since the vessels that assume the uncompleted work can only do so on a dedicated basis.

CCGS Westport, SAR Lifeboat and DND Cormorant Helicopter

5.5 Financial Resources

The Canadian Coast Guard Fleet makes every effort to minimize costs and maximize operational days to achieve its objectives. Regional Operations Centres (ROCs) and regional operational planning groups work with the Fleet's clients to ensure that planned activities are accomplished, that the Fleet is operationally ready, and that any vessel able to do so is multi-tasked to the maximum extent possible.

To sustain an operationally ready fleet capable of meeting service demands, Fleet management continues to seek out internal efficiencies that will optimize national consistency, organizational effectiveness, and linkages with regions and clients. As part of the ongoing Service Level Agreement (SLA) pilot process, Fleet continues to examine how it conducts business and is making needed improvements to enhance service to clients focused on integrated planning and performance management. The Fleet will also renew both its Investment Plan and Fleet Renewal Plan to keep investment planning aligned with operational needs, given funding limitations. Table 12 provides an overview of Fleet's national budget for 2009-2010.

2009-2010 Results

Developed an Integrated Investment Plan under the new Treasury Board Secretariat Policy on Investment Planning – Assets and Acquired Services, to inform government decision-making on resource allocation and ensure decisions are affordable, productive, and financially sustainable while balancing risk and benefits; and

Achieved the Economic Action Plan spending target of $82 million dollars, which has resulted in the construction of 31 new CCG vessels and small craft, and initiated other projects which are on track for completion by March 31, 2011.

Table 12: Fleet National Budget 2009-2010 ($000s)

	Salaries	O&M	Fuel	Subtotal	Total
Fleet	150,240	30,321	40,100	220,661	220,661
Helicopters	-	10,705	-	10,705	10,705
Subtotal	**150,240**	**41,026**	**40,100**	**231,366**	**231,366**
Shore	20,484	5,488	-	25,972	25,972
Total	**170,724**	**46,514**	**40,100**	**257,388**	**257,388**

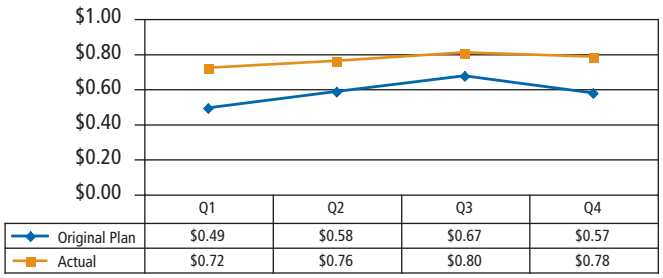
Fuel Prices

Of all the Operations and Maintenance (O&M) funds spent by the Fleet, fuel is the largest single purchase. Because of its volatility, the price of fuel is one of the national financial risks accepted by the Fleet on behalf of its clients. The Fleet carefully monitors fuel prices and consumption as well as currency fluctuation throughout the year to determine whether additional funds are required. This operation is particularly crucial given that a $0.01 increase in fuel prices per litre translates into a $700,000 increase in the Fleet's year-end fuel bill based on a 70 million litre requirement. This is also made more complex when one considers the vast differences in fuel prices from one coast to another and the differences in prices between different grades of fuel. Arctic fuel prices are considerably higher than elsewhere, for example, so refueling icebreakers in the Arctic is an expensive proposition. Therefore, to minimize these costs, icebreakers go to the Arctic with full fuel tanks and "bulk" purchases for fuel are negotiated with competitive bids from suppliers, as part of the normal conditions governing the purchasing process.

Projections for 2009-2010 fuel prices were finalized in January 2009 for planning and budgeting purposes. At that time, prices had collapsed due to the global recession. Fuel prices in January were extremely low ($42.00 US per barrel) and were predicted to remain low for the remainder of 2009 and part of 2010. Between January 2009 and April 2009, however, West Texas Intermediate increased from $42 to $70 US per barrel and remained high for the duration of fiscal year 2009-2010. This resulted in a significant increase in funding requirements for the purchase of fuel, and higher than expected expenditures, as evidenced in Graph 18.

Due to these fluctuations beyond the control of CCG, the Fleet fuel budget was fixed at $40.1 million annually.

Graph 18: Average Quarterly Diesel Price per Litre, 2009-2010



	Q1	Q2	Q3	Q4
Original Plan	$0.49	$0.58	$0.67	$0.57
Actual	$0.72	$0.76	$0.80	$0.78

CCG MBB BO-105 Helicopter

6 LOOKING FORWARD

The Canadian Coast Guard Fleet recognizes that its role as Canada's civilian maritime service provider has never been more important, or more demanding. Every day, our men and women dedicate themselves to serving the Fleet's clients and all Canadians to the best of their ability, embodying the CCG's motto of "Safety First, Service Always". Ensuring our own safety and that of others while delivering quality services will continue to be our utmost priority.

As with all other federal government departments and agencies, the CCG as a whole is faced with new challenges, many of which have a direct impact on the Fleet. Our capacity to adapt, both as individuals and as an organization, will be an ongoing source of strength.

Over the next few years, the Fleet will need to develop increasingly efficient and effective ways to deliver services to the public while dealing with tighter financial parameters and the prospect of unprecedented rates of retirement among our most seasoned employees. While the Fleet has benefited from the results of significant investments in the renewal of its vessels, we will have to manage an anticipated rise in demand for services in light of increased maritime traffic, the challenges of climate change, and heightened focus on environmental protection. Combined with its enhanced role in maritime security and in the Government of Canada's activities in the Arctic, the Fleet must ensure that all its vessels, ACVs, and helicopters remain reliable and cost-effective and that Fleet personnel serve Canadians to the highest professional standards. The Canadian public, the Fleet's clients and the marine industry expect - and deserve - nothing less.

A Day in the Arctic

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Reference List

List of Acronyms

ACV	Air-Cushion Vehicle	MSET	Marine Security Enforcement Team
C&A	Central and Arctic Region	NAFO	Northwest Atlantic Fisheries Organization
CBSA	Canada Border Services Agency	NL	Newfoundland and Labrador Region
CCG	Canadian Coast Guard	OGD	Other Government Departments and Agencies
CCGS	CCG Ship	O&M	Operations and Maintenance
C&P	Conservation and Protection	OWN	Operational Woman Network
DFO	Department of Fisheries and Oceans	PA	Pacific Region
DND	Department of National Defence	PRS	Personnel Review System
EAP	Economic Action Plan	PSAC	Public Service Alliance of Canada
EE MAP	Employment Equity Management Action Plan	QC	Quebec Region
EFM	Ecosystems and Fisheries Management	RCMP	Royal Canadian Mounted Police
ER	Environmental Response	ROC	Regional Operations Centre
FIP	Fleet Investment Plan	SAR	Search and Rescue
FOCOS	Fisheries and Oceans' Coordinated Olympic Support Centre	SC	Ships' Crew
FOR	Fleet Operational Readiness	SLA	Service Level Agreement
FRP	Fleet Renewal Plan	SO	Ships' Officer
FTE	Full-Time Equivalent	S&S	Safety and Security
GPS	Global Positioning System	SSMS	Safety and Security Management System
GT	General Technical	TBD	To Be Determined
IPY	International Polar Year	TC	Transport Canada
ISM	International Safety Management	UNCLOS	United Nations Convention on the Law of the Sea
MA	Maritimes Region	US	United States
MCTS	Marine Communications and Traffic Services	VLE	Vessel Life Extension

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