

Fisheries and Oceans

Canadian Coast Guard Garde côtière canadienne

Canada

Pêches et Océans





The Canadian Coast Guard's (CCG) SAR program involves searching for and assisting people, ships or other craft that are, or are believed to be, in imminent danger.

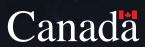
The federal Search and Rescue (SAR) program, led by the Minister of National Defence, is a co-operative effort by federal, provincial, and municipal governments. The Coast Guard's role is to lead, deliver and maintain preparedness for the maritime component of the search and rescue program.

The Air/Marine component of the SAR program is delivered through five rescue centres, three of which are staffed jointly by Coast Guard and National Defence located in Halifax, Nova Scotia, Trenton, Ontario and Victoria, British Columbia, while solely Coast Guard personnel in Québec City, Québec, and St. John's, Newfoundland staff the other two.

These five rescue coordination centres make use of any CCG vessel, including 41 dedicated search and rescue lifeboats stationed strategically throughout the country to provide the best possible response to maritime SAR incidents, 24 hours a day, 365 days a year. The Canadian Coast Guard Auxiliary, a highly effective volunteer organization consisting of about 4,300 members and 1,200 vessels, augments these resources. In addition, use is made of all vessels of opportunity.

The highly trained search and rescue coordinators and crews of the rescue centres are responsible for the planning, coordination, conduct and control of search and rescue operations.

Once the Coast Guard is notified that people are in danger, a search and rescue coordinator begins to



organize the rescue. All available information about the person(s) in danger is gathered and recorded and the positions of potential resources in the area of the incident are determined.

Search and rescue coordinators are trained to evaluate various situations and send the most effective resources to deal with any incident. CCG also provides assistance in incidents in which lives are not in imminent danger in order to mitigate human suffering, as well as protect property and mitigate environmental damage where appropriate.



The SAR program is responsible for developing specialized search and rescue equipment, supporting the international search and rescue community and working with other government departments and organizations to ensure the efficient provision of search and rescue in Canada.

In support of SAR operations, the CCG operates 116 multitasked vessels, all with the capacity to respond to SAR situations. In addition to the fleet, 24 in-shore rescue boats operate during the summer.

The Coast Guard co-ordinates the response to about 7,000 maritime incidents a year. The majority of these incidents involve mechanical breakdowns and other situations where lives are not at risk. In an average year, the CCG saves about 2,900 lives; this represents about 97% of the lives at risk – one of the best records in the world.

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Maritime search and rescue (24 hours) emergency numbers:

Newfoundland and Labrador (St. John's) 1-800-563-2444

Nova Scotia, New Brunswick (Halifax) 1-800-565-1582

St. Lawrence River and Gulf (Québec) 1-800-463-4393

Central Canada and Arctic (Trenton) 1-800-267-7270

Pacific Coast and Yukon (Victoria) 1-800-567-5111





Fisheries and Oceans

Pêches et Océans Canada

Canadian Coast Guard Garde côtière canadienne





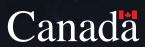
The Canadian Coast Guard (CCG) is the lead federal agency for ensuring the clean up of all ship-source and mystery spills into the marine environment in waters under Canadian jurisdiction, and for supporting other countries under international agreement.

The objectives of the Environmental Response program are to minimize the environmental, economic and public safety impacts of marine pollution incidents. The CCG monitors and investigates all reports of marine pollution in Canada and, in conjunction with commercial partners, uses its own resources and equipment to respond to all reported incidents.

Canadian law places the onus for responding to pollution incidents on the polluter. The Coast Guard's role, through its Environmental Response Division, is to monitor the polluter's efforts as the Federal Monitoring Officer. If a polluter is unknown, unwilling,

or unable to respond to an incident, Coast Guard will assume the role as the On-Scene Commander and manage the response. However, this does not lessen the polluter's responsibility. Through legislation, the CCG can seek compensation for reasonable costs incurred when managing or monitoring the response to an incident.

Environmental Response has expert personnel with extensive experience in responding to marine pollution incidents regionally, nationally and internationally. Regional and area response plans are developed and provide helpful guidance to program personnel when responding to a spill. These plans are based on a National Contingency Plan framework. The CCG also maintains an inventory of oil spill response equipment strategically located in depots across Canada.





The Environmental Response National Training Program has developed training courses and publications on spill response for government, industry and the public. In addition, Coast Guard participates in a variety of exercises with its partners and other stakeholders to practice and verify Canada's readiness to respond to pollution incidents. Research and development projects are a key element in finding new, innovative strategies and technologies to prepare, respond to, and remediate marine pollution incidents.

Under the *International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990* (OPRC 90) the CCG provides support to other countries signatory to this convention, and can also request support from them when necessary.

In addition, the CCG maintains bi-lateral response plans and agreements to respond, in a collaborative manner, to incidents in the contiguous waters of Canada with the United States, Denmark and France.

Environmental Response duty officers are on standby 24 hours a day, seven days a week to investigate or initiate a response to pollution incident reports that are received.

Reporting a Marine Pollution Incident

By law, all pollution or threats of pollution must be reported. Pursuant to the *Pollutant Discharge Reporting Regulations*, 1995, a report shall include the following information:

- the identity of any ship and oil-handling facility;
- the time and location of the discharge or estimated time and location of the probable discharge;
- the nature of the discharge or probable discharge, including the type and quantity of pollutant involved;



- in the case of a discharge, a description of the assistance and salvage measures employed; and
- any other relevant information.

Below are regional contact numbers for reporting a marine pollution incident.

Newfoundland and Labrador Region Toll-free: 1-800-563-9089 (24 hours)

Central and Arctic Region

Toll-free: 1-800-265-0237 (24 hours)

Québec Region

Toll-free: 1-800-363-4735 (24 hours)

Maritimes Region

Toll-free: 1-800-565-1633 (24 hours)

Pacific Region

Toll-free: 1-800-889-8852 (24 hours)

In all regions, marine pollution incidents may also be reported by contacting a Maritime Communication and Traffic Services (MCTS) centre on VHF channel 16.

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Canadian Coast Guard Garde côtière canadienne





The Canadian Coast Guard's (CCG) MCTS program delivers radio communications and vessel traffic services to the marine community and the public at large.

The MCTS program provides:

- marine distress and safety communications;
- screening of vessels entering Canadian waters;
- regulation of vessel traffic in selected Canadian waters; and
- pertinent marine information and public correspondence service, 24 hours a day, 365 days a year.

The MCTS program contributes to the safety of life at sea, the protection of the marine environment, the efficient movement of shipping in waterways and the provision of essential information to mariners. Through the MCTS program, search and rescue responders are notified of persons or vessels in distress. In addition, mariners have relevant accurate and timely information and CCG has enhanced information on vessel transit for maritime security awareness.

MCTS officers ensure prompt responses to distress calls, broadcast maritime safety information such as meteorological and navigational warnings, screen vessels entering Canadian waters, regulate vessel traffic movement to ensure safe and orderly flow of marine traffic, transmit messages related to safety and provide marine information in support of other government departments and agencies and the marine industry.

Other responsibilities of the MCTS centres include providing, on a cost-recovery basis, the exchange of communications between ships and land-based customers.



Twenty-two MCTS centres, staffed by 340 qualified MCTS officers, provide services throughout five regions. In the Canadian Arctic, MCTS centres in Iqualuit and Inuvik provide these services only during the navigational season from mid-May to late November.

Annually, the centres respond to more than 1,600 vessels with defective or deficient equipment. They also monitor in excess of 850,000 vessel movements, of which more than 23,000 are tankers.

The MCTS program is a major component in maintaining marine safety by providing continuous watching of international distress frequencies. This program is the first step in assisting vessels in actual or potential distress, initiating and coordinating search and rescue communications.

MCTS services are provided to several main client groups:

- commercial and fishing vessels;
- recreational boaters;
- port authorities;
- shipping and marine industries;
- pilots,
- the general public;







- provincial and territorial governments;
- other CCG and departmental programs; and
- other government departments, agencies and organizations:
 - Transport Canada;
 - · Citizenship and Immigration Canada;
 - Environment Canada;
 - Department of National Defence;
 - Royal Canadian Mounted Police;
 - Public Health Agency of Canada;
 - · Agriculture and Agri-Food Canada; and
 - Canada Revenue Agency.

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Canadian

Pêches et Océans Canada

Coast Guard

Garde côtière canadienne





The Canadian Coast Guard (CCG) Aids to Navigation program involves the provision, operation and maintenance of over 17,000 short-range and long-range aids to navigation, which provides mariners with safe, accessible and effective vessel transit in Canadian waters. Short-range aids to navigation include visual aids (lighthouses and buoys), aural aids (foghorns) as well as radar aids (reflectors and beacons).

Long-range aids to navigation consist of Loran-C, a hyperbolic radio aid to navigation system that provides position information to vessels on the East and West coasts, and the Differential Global Positioning System (DGPS), which enhances the accuracy of the global positioning system and provides users with unprecedented accuracy in determining their geographical position.

The Aids to Navigation program also publishes and distributes navigation safety information in the form of Notices to Mariners (NOTMAR). This service offers advisories to ensure mariners, fish harvesters, recreational boaters and the marine community have access to safety information to maintain their navigational charts and publications. NOTMARs are available worldwide through the Web site, www.notmar.gc.ca, free of charge.

The CCG is continually testing the performance and durability of modern technologies with the objective of integrating them into Canada's aids to navigation infrastructure to offer a more cost-effective and efficient system for Canadians.



CCG is also working to implement the concept of e-Navigation, which will enhance the ability to share information electronically on a timely basis between ships, from ship-to-shore and vice-versa. Examples of such information include notices to mariners, ice information, water depth and levels, tides and current, etc. Over the years, CCG has developed technical and operational expertise in a number of key components associated with e-Navigation, such as implementation of the Automatic Identification System (AIS), the deployment of the Long Range Identification Tracking (LRIT) system, and a pilot project for the transmittal of waterway information on the Québec portion of the St. Lawrence River.

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Canadian Coast Guard Garde côtière

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Garde côtière canadienne





Icebreaking Services

Canada has more ice floating on its oceans and lakes than any other nation, presenting challenges for vessel navigation. At any time of the year, vessels may encounter ice in Canadian waters. In the Arctic, vessels transiting the remote and inhospitable waters can encounter thick first-year ice and the more dangerous multi-year ice, along with icebergs. In the winter, two-metre-thick ice and six-metre-high ridges are common off the east coast of Newfoundland and in the Gulf of St. Lawrence. The St. Lawrence Seaway has its own hazards; ice jams can occur in its winding channels, leading to flooding in low-lying areas and bringing marine traffic to a halt.

The Canadian Coast Guard's (CCG) Icebreaking Program, in partnership with Environment Canada's Canadian Ice Service, facilitates the informed, safe and timely movement of maritime traffic through and around ice-covered Canadian waters for the benefit of industry and communities with the following services:

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

The Icebreaking Program is active in two seasons. During the winter season, which can last from mid-December until May, the Coast Guard utilizes up to 15 icebreakers and two hovercraft for operations in the Great Lakes and the east coast of Canada from



Montréal to Newfoundland. In the summer season, which is from late June to early November, the CCG deploys six icebreakers to the Arctic.

During the short navigation season in the Arctic, many northern communities rely on Coast Guard icebreaker support to commercial ships that deliver fuel and cargo each year. The present day Coast Guard is part of a federal marine presence that has been maintained in the Arctic since 1904.

Icebreaking operations levels of service, including flood control and harbour breakouts, are targeted to be available on a prescribed schedule with response times for each geographic area. Priority is given for emergencies, flood control, ferries, cargoes (perishable/petroleum/dangerous), commercial traffic and fishing harbours.

The Icebreaking Program's regional Ice Offices, in partnership with the Marine Communications and Traffic Services centres, provide service 24 hours a day during an ice season.

On the international front, Canada and the United States have a shared interest in the Great Lakes; for this reason, the Canadian and the U.S. Coast Guards have established a joint agreement to coordinate icebreaking in these waters.

Other partners of the Icebreaking Program include:

- other government departments;
- marine industry associations;
- pilotage authorities;
- harbour and port authorities;
- ice advisors/navigators; and
- the scientific community.



Clients of the Icebreaking Program include:

- commercial vessels;
- fishing vessels;
- ports and fishing harbours;
- flood plain residents;
- other government vessels;
- industry; and
- Arctic residents.

Through its Icebreaking Program, the CCG responds to about 1,500 requests a year for icebreaking support. About half of these are for route assistance, 300 for flood prevention, 200 for harbour breakouts and ice reconnaissance, and the remainder for Arctic issues. In partnership with the Canadian Ice Service, the Coast Guard provides over 5,000 ice charts a year to marine shipping.



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Canadian Coast Guard Garde côtière canadienne





Opened in 1965, the CCGC has built a solid international reputation in maritime training. In 2005, the College was designated the functional authority for all Coast Guard training and it is committed to becoming the Centre of Excellence for the delivery of a broad range of academic, operational and technical bilingual and relevant maritime training for the Canadian Coast Guard Agency.

The College team consists of approximately 100 people, including 40 instructors located at its campus in Sydney, Nova Scotia. The campus is a client-oriented facility consisting of an administrative and academic complex as well as a fully equipped waterfront training facility and an extensive engineering machine shop. Also onsite is a student residence as well as a large sports complex.

The Canadian Coast Guard College currently offers the programs and courses described below.

Officer Training Program

The CCGC is the educational venue for the Canadian Coast Guard Officer Training Program (OTP). Through this program, officer cadets pursue a four-year degree (45 months) program to become a Navigation Officer or a Marine Engineering Officer. While at the College, officer cadets study a full range of academic curriculum before embarking on timely sea-phase assignments to gain practical, operational skills in the marine environment. Upon successful completion of the program and, through a partnership and Memorandum of Understanding with Cape Breton University, OTP graduates receive a Bachelor of Technology degree in Nautical Sciences. These officers then join one of the 116 vessels in the CG fleet nationally.

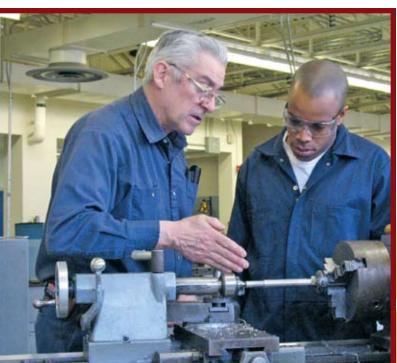


Marine Communications and Traffic Services Ab-initio Training

The Marine Communications and Traffic Services (MCTS) department trains ab-initios or students to become MCTS officers. Graduates of the 25-week MCTS program then train at one of the 22 MCTS centres nationally to gain practical on-the-job experience prior to receiving their centre designation certification.

The CCGC can also then provide certified MCTS officers with professional development training.







Search and Rescue and Environmental Response

The Rescue, Safety and Environmental Response (RSER) department offers training in search and rescue to CCG employees and members of the Department of National Defence. This department also provides courses and professional development training in the field of environmental response.

Marine Maintenance and Equipment Training

The Marine Maintenance and Equipment Training department delivers training to CCG technical personnel. This department provides the technical community from across the country with the training to maintain and repair all marine equipment used on CCG ships as well as the state-of-the art technical equipment used onshore. CCG technical personnel can also avail themselves of other professional development training at the College.

For more information on the CCGC, its programs and courses or how to apply, please visit our web site at **www.ccg-gcc.gc.ca/College**.

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Canadian Coast Guard Garde côtière canadienne





Who We Are

The Canadian Coast Guard (CCG) owns and operates the federal government's civilian fleet, and provides key maritime services to Canadians.

As a Special Operating Agency (SOA) of Fisheries and Oceans Canada (DFO), the Coast Guard helps DFO meet its responsibility to ensure safe and accessible waterways for Canadians. The CCG also plays a key role in ensuring the sustainable use and development of Canada's oceans and waterways. SOA status allows the CCG to focus on service delivery and provides it with the operational and financial flexibilities necessary to do so.

Canadians expect the federal government to:

- protect the marine environment;
- support economic growth;

- ensure public safety on the water; and
- ensure the nation's sovereignty and security by establishing a strong federal presence in Canadian waters.

The CCG helps the government meet the public's expectation of clean, safe, secure, healthy and productive waters and coastlines while facilitating marine commerce critical to Canada's economic prosperity. A nationally recognized symbol of safety, Coast Guard serves on three oceans, the St. Lawrence River, the Great Lakes, and other major waterways. It is often the only federal presence in many remote, Aboriginal, and Arctic communities, operating in some of the most difficult weather conditions in the world.



The CCG has a proud history and a noble tradition of service and safety. It enjoys the confidence of Canadians because of its professional and dedicated workforce who are on station, on patrol or on standby 24 hours a day, 365 days a year.

Our Mandate

The Coast Guard's mandate derives from the Oceans Act, the Canada Shipping Act and the Constitutional Act, 1867.

The Constitutional Act, 1867 gives the federal government exclusive legislative authority over navigation, shipping, beacons, buoys, lighthouses and Sable Island.

The Oceans Act and the Canada Shipping Act give the Coast Guard its specific mandate. Parliament has mandated the Coast Guard to play the lead role in ensuring that our waterways are safe and accessible, and to provide services for the economical and efficient movement of ships.

Our Clients

The CCG serves clients in all sectors of the Canadian economy: the general public, commercial shippers, ferry operators, fishers, recreational boaters, coastal communities, and other government departments and agencies. For example, the Coast Guard:

- provides services to commercial fishers, commercial shippers, port authorities, and recreational boaters;
- responds to federal maritime priorities and natural or man-made emergencies as a key player in various activities mandated under the Federal Emergency Response Plan; and



supports DFO programs by providing vessels and maritime professionals to support the Department's science activities and to help manage and protect fisheries resources. Internal clients include DFO Fisheries Management, DFO Oceans Management, DFO Science, and DFO Small Craft Harbours.

The CCG also supports the non-military activities of other government departments and agencies by providing vessels, aircraft, marine expertise, and other maritime services:

- Department of National Defence;
- Department of Foreign Affairs and International Trade;
- Environment Canada;
- Health Canada;
- Natural Resources Canada:
- Natural Sciences and Engineering Research Council;
- Public Safety Canada (Royal Canadian Mounted Police, Canadian Security Intelligence Service and Canada Border Services Agency); and
- Transport Canada.

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nd Oceans Pêches et Océans Canada

Canadian Coast Guard Garde côtière canadienne





History of the Canadian Coast Guard

The Canadian Coast Guard (CCG) was created in 1962 to address the need to provide services to mariners in Canadian waters. This included three main responsibilities:

- offering dedicated search and rescue services;
- maintaining Arctic sovereignty; and
- responding to technical advances and increasing vessel traffic.

Several hundred years ago, there was a near-total lack of attention to the hazards of fishing and maritime shipping in Canada, as well as a lack of concern for the welfare of sea travellers sent to sea without experience or appropriate training.



In the 1700s, the need to assist shipwrecked mariners was finally acknowledged and the first government lifeboat stations were established in Eastern Canada. The country's first light station was established in 1733 on Nova Scotia's Sable Island, followed by others on Sambro Island, Nova Scotia in 1758, Cape Breton in 1777, and St. John's, Newfoundland in 1791.

As Canada's shipbuilding industry grew in the 1800s, so too did the realization that there was also a need to protect the fishery. The first patrol vessels to enforce fisheries regulations appeared on the eastern seaboard. When the Welland Canal linked Lake Ontario to Lake Erie in 1829, patrol vessels were also assigned to the Great Lakes.

At Confederation in 1867, the new national government acquired a large collection of aid systems, lifesaving stations, canals and waterways, regulatory bodies and



associated vessels, along with the shore infrastructure that supported them. One of the first measures taken by the new Parliament was to pass an *Act for Organization* of the Department of Marine and Fisheries of Canada, which received vice-regal assent on May 22, 1868.

A coast guard remained under the Department of Marine and Fisheries for 68 years until 1936, when the Department of Transport was created and given responsibility to regulate land, sea and air transportation. Its responsibilities included matters such as maintaining aids to navigation, classifying government vessels and granting certificates to masters and engineers. For the first time, icebreakers were used to reduce spring flooding and to escort ships en route to the port of Churchill on Hudson Bay.

In 1946, the then Deputy Minister of Transport instituted direct contact between the marine search and rescue service and the Royal Canadian Air Force Air-Sea Rescue branch to establish coordination and control of the government's search and rescue facilities.

In 1950, an incident in which two fishing boats were lost in Nova Scotia with no government vessel available for search and rescue pushed the government towards the formation of a coast guard.

In 1951, the Royal Canadian Air Force was tasked with coordinating all government vessels to participate in search and rescue. Eight years later, a major fire on board a freighter near Vancouver proved to be the catalyst that led to the creation of a national coast guard.

Then, too, the issue of Arctic sovereignty surfaced and there was a growing need to respond to burgeoning maritime traffic.

On January 26, 1962, Prime Minister John Diefenbaker's Transport Minister, Leon Balcer, told the House of Commons that, henceforth, his Department's fleet of 241 ships would be known as the Canadian Coast Guard. The Coast Guard was originally created to offer a national search and rescue service, provide a visible Canadian presence in the Arctic and to take on many of the maritime obligations of the Department of Transport.

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In 1995, the Coast Guard returned to Fisheries and Oceans Canada as one of its administrative sectors.

On December 12, 2003, then Prime Minister Paul Martin announced changes within the Government of Canada, among which was awarding the Canadian Coast Guard the status of Special Operating Agency (SOA), and the largest in Canada. Being an SOA did not change the Coast Guard's roles and responsibilities; rather, the new status provided the organization with the means to deliver services more effectively to its clients.

Five CCG regions, the Maritimes, Pacific, Newfoundland and Labrador, Québec and Central & Arctic, work in collaboration with Coast Guard Headquarters to offer quality programs and services to the Canadian population.

Today, the CCG continues to play a vital role in marine safety, environmental protection and promoting maritime commerce. It also plays an important support role in maritime security and Arctic sovereignty.





Fisheries and Oceans

Canada

Garde côtière canadienne

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Canadian Coast Guard





Waterways Management Services

The Waterways Management program enables the Canadian Coast Guard (CCG) to help ensure safe and efficient navigation, supports protection of the marine environment, and facilitates marine trade and commerce.

The core activities of the program include:

- providing channel design guidelines to help ensure that ship channel design, maintenance and usage is safe, efficient and environmentally sound;
- maintaining the international shipping channels in the Great Lakes system;
- managing the maintenance of the St. Lawrence ship channel;
- providing channel safety information to users, such as channel bottom conditions and water-depth forecasts;

- operating/maintaining channel marine structures, such as ice control structures;
- operating the Canso Canal; and
- supporting the International Joint Commission in controlling levels and flows in the St. Lawrence River system.

Waterways Management sustains navigable channels, reduces marine navigation risks and supports environmental protection. This program is delivered, in part, with the support of CCG's operationally capable and ready fleet.

The program provides significant economic benefits to the marine shipping industry as well as economic and social benefits to the public.









- increased freight revenues, as a result of the ability to load deeper because of fore-knowledge of available safe channel depth (that is, data from bottom sounding surveys combined with water level forecasts);
- reduced transit times, again because of the channel safety information provided to the mariner (bottom surveys and water level forecasts);
- reduced insurance rates and legal costs as a result of safe channel design, maintenance practices and safety information, as well as fewer accidents; and
- more business to Canadian ports as a result of safe, reliable, economic channel navigation.

Safe and efficient channels benefit Canadians in general by:

- reducing the transportation component of the price of goods;
- avoiding the high social costs of marine accidents including impacts on local economies and environmental consequences;
- contributing to achievement of environmental commitments by supporting the use of a highly fuel efficient mode of transportation;

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- maintaining Canada's reputation as a preferred trading partner;
- enhancing the competitiveness of Canadian industry; and
- maintaining Canada's reputation, including internationally, as doing our part to support marine transportation.

There are more than 100,000 transits in our waters each year, including some 36,000 domestic and commercial arrivals. Millions of recreational and touring boaters also use our commercial waterways each year.

Two thousand kilometres of our 7,000 kilometres of commercial waterways are classified as 'confined in width' and 'restricted in depth' for the large ships that use them.



Canadian Coast Guard Pêches et Océans Canada

Garde côtière canadienne





Our Fleet

The Canadian Coast Guard (CCG) is the marinedelivery arm of Fisheries and Oceans Canada (DFO). Through its Fleet directorate, the CCG manages an operationally ready civilian fleet of 116 vessels, in support of Canada and Canadians, on four equally important levels:

- providing CCG services related to:
 - aids to navigation;
 - icebreaking;
 - search and rescue;
 - maritime security;
 - environmental response; and
 - marine communications and traffic services.
- supporting DFO programs by providing vessels and maritime professionals to support the department's science activities and to help manage and protect fisheries resources;

- supporting the non-military activities of other government departments and agencies; and
- serving the broader Canadian interest by responding to federal maritime priorities and natural or manmade emergencies.

The Fleet effectively manages its diverse and numerous responsibilities by being versatile and highly adaptable. It operates out of five regions, with Regional Operations Centres tasking and deploying vessels and maritime professionals to meet service needs, with a National Coordination Centre facilitating national Fleet management and an integrated national response when needed.

To fulfill its role, the CCG needs an adaptable fleet that can deliver a variety of services in a safe and secure, effective and efficient manner. All of our vessels are equipped to support the provision of two or more tasks (multitasked), allowing them to efficiently support multiple clients during a single mission.

The fleet serves primarily CCG programs and DFO programs, such as:

- Icebreaking;
- Aids to navigation;
- Search and Rescue;
- DFO Science;
- DFO Fisheries and Aquaculture Management.

Our vessels and helicopters also support the programs of other government departments and agencies, such as Natural Resources Canada, Environment Canada and the Royal Canadian Mounted Police.





Number of vessels and helicopters

Vessel and Helicopter Types (2007-2008)	Number
Polar Icebreakers	0
Heavy Icebreakers	2
Medium Icebreakers	4
High Endurance Multitasked Vessels /	
Light Icebreakers	7
Medium Endurance Multitasked Vessels	4
Offshore Patrol Vessels	4
Midshore Patrol Vessels	8
Offshore Oceanographic Science Vessels	2
Offshore Fishery Science Vessels	4
Air Cushion Vehicles	4
Special Navaids Vessels	3
Search and Rescue Lifeboats	41
Hydrographic Survey Vessels	5
Channel Survey and Sounding Vessels	2
Near-Shore Fishery Research Vessels	6
Specialty Vessels	20
Vessel Total	116
Helicopter Total	22

Further information about the Fleet can be found in the *Our Fleet* section of our Internet site: **www.ccg-gcc.gc.ca**

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s Pêches et Océans Canada

Canadian Coast Guard Garde côtière canadienne





The role of Maritime Security is to meet government expectations for a departmental contribution to national security by means of proactive leadership and management of the maritime security file within Fisheries and Oceans Canada (DFO). The Canadian Coast Guard (CCG) does not have an explicit mandate for maritime security. The agency's involvement in maritime security is based on its obligation under the *Oceans Act* to provide ships, aircraft and other marine services in support of federal maritime priorities.

The Coast Guard's primary role is to provide vessels and shore based infrastructure to:

- aid in developing an awareness of possible maritime security threats;
- provide support for on-water enforcement and responsiveness; and
- support the safety and security of Canadians.

CCG Maritime Security, therefore, supports a compilation of initiatives aimed at providing value-added service solutions to various government departments and agencies mandated to provide security and enforcement within Canada. In conjunction with these departments and agencies, CCG contributes to the analysis and creation of actionable intelligence in support of enhanced maritime and national security. The Maritime Security group is also responsible for the effective development and implementation of strategies within DFO, consistent with the federal government's priorities concerning the enhancement of maritime security. Some of the individual initiatives are listed below.

In support of an enhanced level of maritime domain awareness, the CCG contributes to maritime security through the operation of the Automatic Identification System (AIS) and the development of





the Long Range Identification and Tracking (LRIT) system. AIS involves the surveillance and identification of vessels approaching and operating within the Great Lakes and up to 40 nautical miles from Canada's east and west coasts. The LRIT system will collect positional data on Canadian flag vessels, international vessels destined

for Canadian ports, and vessels transiting within 1,000 nautical miles of Canada's shores.

The Coast Guard also participates in the three Marine Security Operations Centres, designed to generate maritime situational awareness by combining the knowledge and skill sets of the government agencies engaged in, or in support of, marine security. The Coast Guard's role in these centres is to help detect, assess, and support the response to any threat to marine security that could affect the safety, security, environment or economy of Canada.

The Coast Guard is also involved in the Maritime Security Enforcement Team program with the Royal Canadian Mounted Police (RCMP).



The Coast Guard is responsible for vessel operation in this program, while the RCMP is responsible for all law enforcement activities. This partnership delivers a dedicated security enforcement capacity on the Great Lakes- St. Lawrence Seaway. Here can be seen, as in all above activities, the overarching objective to position DFO as a value-added and proactive partner in the delivery of multi-agency solutions in the enhancement of Canada's maritime security.



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Canadian Coast Guard Garde côtière canadienne





Pacific Region

Coverage

Pacific Region consists of more than 27,000 km of British Columbia coastline, and includes the Yukon Territory and 560,000 km² of ocean. Weather can vary dramatically across the British Columbia coast, known internationally as one of the world's wildest coastlines.

The mouth of Juan de Fuca has been called the **Graveyard of the Pacific** – a testament to some of the harsh and varying weather conditions that Pacific Region encounters along its rugged coastline.

This broad area is patrolled by a fleet of 14 vessels, two hovercraft, 16 search and rescue lifeboats and five helicopters. Pacific Region's staff includes more than 1,000 dedicated employees who work diligently to provide Coast Guard services to the Canadian public and the maritime industry.

Marine Communications and Traffic Services (MCTS)

Pacific Region has five MCTS centres covering the entire coast. These centres are located in Vancouver, Victoria, Prince Rupert, Comox and Tofino, British Columbia. With nearly half a million vessel movements per year, the MCTS centres monitor more volume than all the other regions combined, accounting for more than 70% of the marine traffic in Canada.

Aids to Navigation

Pacific Region has over 1,800 aids to navigation. The majority of the fixed aids are in remote areas of British Columbia and the Yukon. Pacific Region has more lighted aids in higher latitudes, which means its solar systems must be designed to work through the long dark winters.





There are 27 staffed lightstations and five de-staffed lightstations in the region, as well as 17 former de-staffed lightstations downgraded to major shore light status.

Waterways Management Services

Port Metro Vancouver, the largest port in Canada, is located in Pacific Region. It ranks #1 in Canada in total cargo handled and total container through-put and #1 in North America in total foreign exports.

As it is the most diversified port in North America, the Waterways Management Program in Pacific Region works with other government departments, port authorities and river pilots to ensure that ship channel design, maintenance and usage is safe, efficient and environmentally responsible.

Environmental Response Services (ER)

Of the 710 pollution incidents reported in 2007, Coast Guard Environmental Response responded to 209 oil pollution incidents.



A pipeline is being built from the Alberta Tar Sands to Kitimat, with completion forecast in 2010, resulting in the annual shipment of crude expected to increase from approximately four million tons at present to 20 million tons upon completion.

Search and Rescue (SAR)

Pacific Region's 12 Coast Guard stations operate 24 hours a day, 365 days a year. In an average year, the Joint Rescue Coordination Centre in Victoria responds to 2,161 maritime SAR cases. Of these, 17% are classified as distress or potential distress incidents in which, on average, 1,398 lives are saved.

The Coast Guard Auxiliary in Pacific Region has 1,060 volunteer members committed to serving one of 50 community-based stations throughout the region. Collectively, 76 vessels are available through this organization for marine search and rescue as needed.



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Canadian Coast Guard Pêches et Océans Canada

Garde côtière canadienne





Coverage

Canadian Coast Guard (CCG) Central and Arctic (C&A) Region is bounded by 71% of Canada's coastline, encompassing approximately 65% of Canada's marine waters. The region covers the Arctic seas, the Great Lakes, the St. Lawrence Seaway west of Beauharnois, and inland and coastal waters of Nunavut, Ontario, Manitoba, Saskatchewan, Alberta, the Northwest Territories and the North Slope of Yukon.

Coast Guard services in C&A Region are provided by a fleet of 24 vessels and two helicopters including six large vessels greater than 33 metres, five small vessels less than 33 metres, ten search and rescue lifeboats, and three maritime security vessels.

C&A Region has a total of 580 employees in shoreand ship-based positions, providing essential services to mariners, the general public and other government departments. Regional headquarters is located in Sarnia, Ontario.

Marine Communications and Traffic Services (MCTS)

There are five MCTS centres in Central and Arctic Region located in Inuvik, Northwest Territories, Iqaluit, Nunavut, Prescott, Sarnia and Thunder Bay, Ontario providing distress and safety communications and coordination. These centres operate on a 24/7 basis year round with the exception of two Arctic sites which operate on a seasonal basis.

Aids to Navigation

C&A Region is responsible for over 7,100 fixed and floating aids to navigation, serving a mix of commercial and recreational users, in an environment



that covers a vast area with diverse climates. The main international shipping channels on the Great Lakes have a mix of Canadian Coast Guard and United States Coast Guard (USCG) aids to navigation as the many of the channels cross the international boundary.

Waterways Management Services

C&A Region manages channel maintenance dredging services in the Canadian waters of the Great Lakes where Canada has an international agreement with the United States. The Waterways Management Program conducts hydrographic surveys on the Red River in Manitoba, on the Hay River in the Northwest Territories and monitors the condition of the Canadian sections of the Detroit River, St. Clair River and St. Mary's River.

Environmental Response Services (ER)

As the primary responder or federal monitor to all reported ship-source and mystery spills on the Great Lakes, ER maintains and operates an inventory of marine pollution countermeasures equipment located in numerous sites around the region. South of 60° north latitude, the First Response Unit equipment is road transportable. In the Arctic, ER maintains Rapid Air Transportable equipment in Hay River.

Icebreaking Services

The icebreaking program in C&A supports international and domestic shipping in the St. Lawrence Seaway system and on the Great Lakes in partnership with the USCG offering the marine industry a fully integrated, bi-national service.





Search and Rescue (SAR)

C&A Region maintains a fleet of nine primary search and rescue vessels and six Inshore Rescue Boat stations and is supported by 839 volunteers and 123 vessels from the Canadian Coast Guard Auxiliary throughout the Great Lakes, Lake Winnipeg and the Arctic. The Joint Rescue Coordination Centre (JRCC) is staffed jointly by Coast Guard and Canadian Forces officers coordinating response to Search and Rescue incidents throughout the region. In an average year, JRCC Trenton responds to 2,000 maritime SAR cases, of these, 20% are classified as distress or potential distress incidents in which, on average, 300 lives are saved.

Maritime Security

C&A operates three security vessels in support of the federal government's Marine Security Enforcement Team (MSET) program. CCG and Royal Canadian Mounted Police deliver the program jointly. The vessels are divided into three patrol zones focusing on the security of the Great Lakes - St. Lawrence Seaway system. The MSET program is transferred to icebreakers in the winter season.

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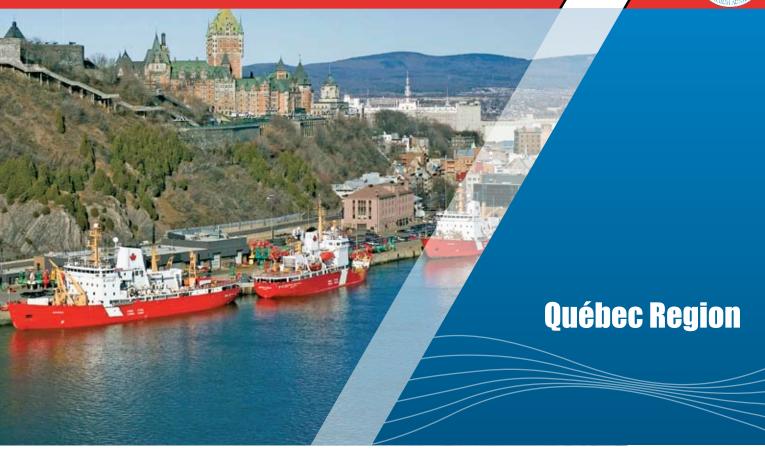
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Pêches et Océans Canada

Canadian Coast Guard Garde côtière canadienne





Coverage

The area of the Québec Region includes the river, the estuary and a large section of the St. Lawrence Seaway, including coastal waters of Magdalen Islands and the northern part of Québec to the south of 60°N, which means 6,000 kilometers of coasts.

The St. Lawrence River is a complex navigation course owing to its narrow and sinuous channel and to its restricted depth of water. In addition to being the object of huge tides, sometimes-capricious currents and weather conditions that make shipping difficult, this channel is covered with ice between December and April.

Since four of the main Canadian harbours are located in the Québec Region (Montréal, Québec, Port-Cartier, Sept-Îles), the marine activity has suffered a major increase, namely owing to:

- the increased size and number of ships using the St. Lawrence;
- the increased volume of merchandise handled by Québec ports, which went from 68 million tons in 2001 to 118 million tons in 2007;
- the large number of terminal construction and port expansion projects planned or under progress;
- the 32% increase in the number of cruise companies that came to Québec in 2008 compared to 2007.

Throughout the years, the 750 professional and dedicated employees of the Québec Region, including seagoing personnel, have improved their qualifications and built on innovation in order to meet these many challenges. Commercial and pleasure boaters, fishermen and the general public have access to



strategic information regarding shipping conditions on the **MARINFO** Internet portal.

The region has two primary operational bases in Québec City and Sorel, as well as an air cushion vehicle base in Trois-Rivières. In addition, it owns a fleet of 18 ships, two air cushion vehicles, six helicopters and six seasonal rescue boats.

Marine Communications and Traffic Services (MCTS)

MCTS provides services from four centers located in Montréal, Québec City, Les Escoumins and Rivière-au-Renard. By acting all year long as first responders for ships, marine communication and traffic officers are an essential link to ensure safety and protect human lives at sea. In addition, the arrival of larger ships in the St. Lawrence River means new challenges for these officers, who guarantee efficient marine traffic in addition to guarding the environment while ensuring the strict management of 100,000 ship movements each year.

Aids to Navigation

Buoying operations include the yearly installation and removal of close to 1,200 summer and winter buoys, the maintenance of some 575 fixed and electronic aids on our coasts, as well as the operation of four satellite global positioning stations in differential mode (DGPS). The region also operates 24 operational and entirely automated lighthouses.

In addition to the St. Lawrence River, the Québec Region is also responsible for buoys on the Saguenay, Richelieu, Ottawa and des Prairies rivers, as well as the Saint-Louis and Deux-Montagnes lakes.

Management of waterways

Thanks to its waterways management and maintenance department, the Québec Region ensures that dredging operations provide a safe water depth for shipping, especially in the 240 kilometers of the dredged channel section of the St. Lawrence.

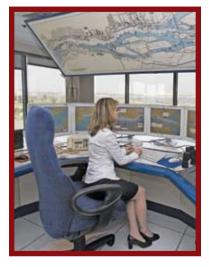
Environmental Response Services (ER)

Over 15 million tons of chemicals and petroleum products have been handled in ports of the Québec Region in 2005. Some 150 to 200 marine incidents threatening the environment are reported each year. Since 70% of the Québec population is living on the shores of the St. Lawrence, which provides drinking water to nearly 50% of them, public health, the environment and socio-economic activities may be affected should an oil spill occur. This is why the region engages and trains stakeholders in case of marine pollution.



Icebreaking Services

The Québec Region provides icebreaking and escort services in the area located between Montréal and the Belle Isle and Cabot straits. In the St. Lawrence estuary and gulf, main activities consist in assigning ice roads and in escorting commercial ships in difficulty. On the St. Lawrence River, main activities include flood and jam prevention, monitoring of ice conditions; ice map



production using helicopter patrols, video and satellite remote monitoring.

Search and Rescue (SAR)

With the help of five rescue stations and six seasonal boats personnel, the Maritime Rescue Sub-Centre Québec ensures year after year the coordination of 1,200 search and rescue operations, thus saving 330 lives. The Coast Guard Auxiliary, which is made up of 650 volunteers and 160 boats, performs 30% of search and rescue operations.

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Pêches et Océans Canada

Canadian Coast Guard Garde côtière canadienne





Coverage

Maritimes Region covers approximately 11,400 km of coastline and encompasses three provinces, which are New Brunswick, Nova Scotia, and Prince Edward Island, as well as adjacent waters, extending to the 200-mile economic zone, including the southern Gulf of St. Lawrence.

The region has a fleet of six helicopters and 25 vessels including one heavy icebreaker, five ice-strengthened vessels, three science vessels, nine lifeboats and six inshore patrol vessels.

Approximately 940 employees work in the region. Headquarters is located in Dartmouth, Nova Scotia.

Marine Communications and Traffic Services (MCTS)

Maritimes Region has three MCTS centres, located in Halifax and Sydney, Nova Scotia, and at Saint John, New Brunswick. A full range of MCTS services are provided at these centres.

Aids to Navigation

There are over 6,000 fixed and floating aids to navigation in the region. Of the 830 fixed aids, there are approximately 50 major and 150 minor lightstations. All lightstations, except the one located on Machias Seal Island, are automated.

Waterways Management Services

In 2007/08, Waterways Management Services conducted 13 priority surveys in areas where either local knowledge, charting or bottom conditions are not accurately known, and 16 other main channel surveys.



Canso Canal

From April 14 to December 23 each year on a 24-hour basis, Maritimes Region operates the Canso Canal, which links Chédabucto Bay to Northumberland Strait. In 2007, there were 3,025 vessel transits through the Canal.

Environmental Response Services (ER)

Within the region, four Emergency Response depots respond to an average of 200 oil pollution incidents per year. Saint John, New Brunswick, including the lower Bay of Fundy, is considered one of the areas at highest risk for oil spills in the country.

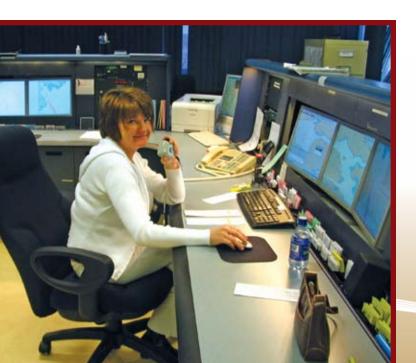
Icebreaking Services

Most of the commercial shipping coming into Canada steams through the Gulf of St. Lawrence, with the highest density of foreign tankers transiting the Bay of Fundy and the Cabot Strait. In Maritimes Region, five helicopter-capable vessels are responsible for icebreaking and ice escort. During the winter, the icebreakers and shipboard helicopters operate as a team to facilitate the movement of ships through ice infested waters.

Search and Rescue (SAR)

The Maritimes Region Joint Rescue Coordination Centre (JRCC) coordinates all search and rescue operations associated with aircraft and marine emergencies in eastern Canada.

The Regional Operations Centre in Dartmouth, Nova Scotia, initiates and coordinates responses to non-SAR related marine and fisheries incidents and alerts response agencies of all maritime incidents occurring in the region and associated waters.





In an average year, the JRCC in Halifax, Nova Scotia, responds to 1,400 maritime SAR cases. Of these, 11% are classified as distress or potential distress incidents in which, on average, 410 lives are saved. Also contributing to overall safety of mariners is the Coast Guard Auxiliary, with approximately 759 volunteers and 434 vessels.

Maritime Security

Maritimes Region participates in the coastal Marine Security Operations Centre led by the Department of National Defence. Located in Halifax, Nova Scotia, this centre is one of three in Canada established to help detect, assess and support the response to any threat to marine security that could affect the safety, security, environment or economy of Canada.

Sable Island

Located approximately 300 km east of Halifax, Nova Scotia, Sable Island is approximately 45 km long, one km wide, and is composed entirely of sand. Pursuant to the Sable Island Regulations of the *Canada Shipping Act*, Maritimes Region is responsible for controlling access to Sable Island and ensuring protection of the famed horses that reside there.

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Oceans Pêches et Océans Canada

Canadian Coast Guard Garde côtière canadienne





Newfoundland and Labrador Region

Coverage

The Newfoundland and Labrador (NL) Region covers more than 28,956 km of shoreline and 2.5 million km² of continental shelf.

The severity of weather is second only to the Canadian Arctic. Some of the most severe sea state conditions in Canada are present in this region, including a long ice season with frequent heavy ice conditions, icebergs, reduced visibility, gales and storms, and freezing spray.

Coast Guard services in the NL Region are provided by 16 vessels, 75 small craft and three helicopters.

Approximately 950 employees provide Coast Guard services in this region. The regional headquarters office is located in St. John's, Newfoundland.

Marine Communications and Traffic Services (MCTS)

There are five MCTS centres across the NL Region, all of which operate 24 hours a day, seven days a week. They provide a safety watch on international distress frequencies and manage vessel traffic. They are located in Placentia, St. John's, Port aux Basques and St. Anthony, Newfoundland, as well as in Goose Bay, Labrador.

Aids to Navigation

More than 1,400 fixed and floating aids to navigation, four long-range navigation stations and four differential global positioning system transmitting stations assist mariners in NL waters. The region has a fully lighted buoyage system, using the latest technology light emitting diode lights. There is a total of 55 lighthouses in NL Region, 23 of which are staffed.





Waterways Management Services

The NL Region is responsible for surveying the bottom of seven channels for available depths, identifying hazards to navigation, and providing the information to mariners through Notices to Mariners (NOTMAR) and Notices to Shipping (NOTSHIP). In 2007/08, Fortune Harbour approaches were surveyed and both Errington Narrows and the Goose Bay area were surveyed with the results forwarded to mariners and shippers.

Environmental Response Services (ER)

The Regional Environmental Response Division responds to an average of 200 marine pollution reports annually. With the largest oil-handling port in Canada, a rapidly expanding offshore oil industry and millions of tons of potential polluting cargo and vessel fuel transiting regional waters each year, the region maintains an immediate readiness to act effectively to protect the marine environment.

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Icebreaking Services

With the second longest ice season and among the harshest sea conditions in Canada, the NL Region is one of two CCG regions where ice is a year-round hazard to navigation. Icebreaking is particularly important, as 90% of the coastline is ice covered during the winter months.

Search and Rescue (SAR)

NL Region has four CCG stations, and three inshore rescue boat stations. In an average year, the Maritime Rescue Sub-Centre in St. John's, Newfoundland responds to approximately 500 SAR cases. Of these, 28% are classified as distress or potential distress incidents in which, on average, 600 lives are saved.

The Canadian Coast Guard Auxiliary has 1,000 members and 460 vessels in NL Region. Each year, the Auxiliary responds to 35% of the maritime search and rescue incidents.



Pêches et Océans Canada

Canadian Coast Guard Garde côtière canadienne





Our Role in the Arctic

The Canadian Coast Guard (CCG) has a long and proud history of service in the Arctic.

CCG icebreakers are deployed to the Canadian Arctic each year specifically to provide services in support of the various mandates of Fisheries and Oceans Canada (DFO) and the CCG, as well as to meet the general needs of the people and the Government of Canada.

Every year, from late June to early November, the CCG deploys one light, two heavy, and four medium class icebreakers to the Arctic. These icebreakers operate in a harsh climate with some of the most challenging sea ice conditions in the world. They are often the first vessels into the Arctic each shipping season and the last to leave. CCG also has three vessels that provide services on the Mackenzie River and Beaufort Sea. Of all the vessels deployed, two are solely dedicated to science missions: the CCGS *Amundsen* and the CCGS *Nahidik*.

Close to 70 CCG employees are assigned, on a seasonal basis, to northern operations. In addition, the officers and crew of six icebreakers from Newfoundland and Labrador, Québec and Pacific regions are deployed to the Arctic in the summer as part of the regular operational plan.

Our Arctic activities, many of which are delivered in partnership or on behalf of other federal departments and agencies, academic institutions, and northern communities, include:

Escorting commercial ships through ice to ensure access to Northern communities;

Activities include providing ice route information, escorting commercial vessels through ice infested waters, as well as harbour breakouts. The number of foreign-flag ships escorted each year by CCG icebreakers varies, depending on ice conditions. However, ice conditions notwithstanding, an average of approximately 12 foreign-flag ships benefit from this service yearly.





Supporting scientific endeavours such as hydrographic charting and marine science;

Activities include providing a marine platform and personnel in support of DFO science activities, the ArcticNet science community and other scientific organizations through initiatives such as the International Polar Year where possible.

Maintaining aids to navigation in the Canadian Arctic waterways;

 Activities include deployment, recovery, commissioning and maintenance of floating aids, construction and decommissioning of fixed aids.

Acting as the primary response lead for pollution incidents north of 60;

■ Ships, aircraft and personnel are secondary search and rescue resources, unless designated as primary and, as such, will be used for search and rescue as deemed appropriate. The Joint Rescue Coordination Centre tasks all vessels, aircraft and personnel to search and rescue directly.

Providing marine search and rescue (SAR) services;

Ships, aircraft and personnel are secondary search and rescue resources, unless designated as primary and, as such, will be used for search and rescue as deemed appropriate. The Joint Rescue Coordination Centre tasks all vessels, aircraft and personnel to search and rescue directly.



Operating two seasonal Arctic Marine Communications and Traffic Services (MCTS) centres and providing marine telephone services such as radio medical calls;

Services provided from one centre located in Inuvik, covering the western Arctic, and the other located in Iqaluit servicing the eastern Arctic. These MCTS centres are only in operation during the Arctic navigational season.

Resupplying remote Arctic areas where commercial shipping services are not available;

■ Delivering food, cargo and fuel to remote sites such as Eureka, Tanquary Fjord, Kugaaruk and other locations where commercial ships do not go.

Providing support to other government departments, agencies and other organizations to conduct important work in the Arctic environment;

 Providing vessels, aircrafts and marine personnel to assist in carrying out important work related to the Arctic.

CCG icebreakers on Arctic deployment are also the most visible and effective marine element in support of Canadian sovereignty in the North.



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Canadian Coast Guard Pêches et Océans Canada

Garde côtière canadienne





The Canadian Coast Guard (CCG) delivers maritime services so that a number of government departments, agencies, and other organizations can carry out important work in the marine and fresh water environment.

The CCG supports the following government departments and agencies.

Fisheries and Oceans Canada's (DFO) – Science, Fisheries and Aquaculture Management and the Canadian Hydrographic Service (CHS)

- Supporting scientific activities related to the conservation, protection and sustainable development of fisheries resources, fish habitat management and study of the influences of climate variations and aquatic ecosystems
- Broadcasting Notices to Harvesters and handling catch reports and calls during the seal hunting season

- Providing vessels to allow Conservation and Protection officers to patrol and conduct inspections at sea for compliance with all of the regulations designed to ensure orderly fisheries
- Providing sounding, hydrographic survey, water level and channel bottom information to CHS for navigational charts and other publications, including Notices to Shipping (NOTSHIPS) and Notices to Mariners (NOTMAR)

Transport Canada's (TC) – Marine Security, Marine Safety, TC inspectors, Navigable Waters Protection Program, the St. Lawrence Seaway Management Corporation and port corporations

- Providing vessels to conduct safety inspections on vessels involved in ship-source pollution incidents
- Providing support in controlling the marine traffic within the St. Lawrence Seaway and certain ports within Canada



- Providing vessel movement, incidents, pollution and water ballast information to ensure compliance with vessel reporting and security regulations
- Collecting information for the 96-hour Pre-arrival Information Report from vessels destined for Canadian waters
- Providing operational guidance for the design and installation of private buoys and aids to navigation systems

Royal Canadian Mounted Police (RCMP)

- Delivering dedicated vessels to support national security and law enforcement capacity on the Great Lakes-St. Lawrence Seaway system
- Providing vessels and maritime expertise to enforcement officers conducting routine vessel interceptions and boarding to support law enforcement activities, such as drug trafficking

Department of National Defence (DND)

- Responding to federal maritime priorities as well as natural and man-made emergencies
- Providing a training platform for Joint Task Force Two, the Canadian Navy and the Royal Canadian Sea Cadets
- Supporting joint search and rescue operations and sovereignty exercises

Canada Border Services Agency (CBSA)

 Providing vessels to conduct vessel interceptions and boarding to counter the illegal migration of people and goods, plants and animals into and out of Canada

Environment Canada (EC)

- Providing vessels to conduct impact assessments on the marine environment following ship-source pollution incidents
- Deploying instruments and buoys used by EC to monitor toxic substances, pollutants and severe weather warnings, to collect data for weather forecasts and to ensure compliance of environmental protection legislation
- Providing aircraft in support of migratory bird surveillance operations

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- Providing sounding, water level and channel bottom information for the creation of various publications
- Broadcasting safety and weather information to ships
- Transporting fuel and cargo needed to operate the Eureka weather station and ice camps

Natural Resources Canada (NRCan)

- Providing vessels to conduct seismic and bathymetric surveys in support of Canada's submission to establish the outer limits of our sovereign rights in the Arctic under the United Nations Convention on the Law of the Sea (UNCLOS)
- Providing vessels and air support to acquire, interpret, maintain and distribute maps, information, technology, standards and expertise concerning the Canadian landmass, as well as in the fields of geosciences, geodesy and surveying

The CCG reports all marine incidents and accidents to the **Transportation Safety Board of Canada** and provides vessels and aircraft in support of investigations.

The Coast Guard also provides information regarding vessel traffic movement, suspicious traffic and maritime activity to DND, Agriculture Canada, Immigration Canada, Public Health Agency of Canada, the RCMP and the Department of Foreign Affairs and International Trade in the interest of safeguarding the health, safety and security of Canadians.

Lastly, the CCG delivers support to the **ArcticNet** community, led by the Laval University, and other organizations to conduct scientific research related to climate change and its impact on the marine environment.