Follow-up Questions from the Standing Senate Committee on Fisheries and Oceans on Maritime Search and Rescue in Canada

Question 1:
How many people are involved in the maritime search and rescue operations led by the CCG? And how does it work from a signal of distress to the rescue of people?

A. Number of CCG people involved in maritime search and rescue
All of Coast Guard’s 115 vessels provide secondary SAR capacity, and 2,300 seagoing personnel provide support for SAR.

Working on the shore side, Coast Guard has 214 personnel dedicated to SAR:
• 19 SAR Program officers
• 48 JRCC SAR Coordinators (Halifax, Trenton, MRSC Quebec, Victoria)
• 3 SAR Superintendents
• 6 Administrative Support
• 138 Marine Communications and Traffic Services (MCTS) personnel working at safety desks.

Onboard our 115 vessels Coast Guard has 2,300 seagoing personnel who provide support for SAR. Of the 2,300 personnel, 514 are Rescue Specialists assigned to vessels.

Included in the 115 vessels and 2,300 seagoing personnel, are 40 dedicated primary SAR Lifeboat stations, 320 personnel working at those stations, and 6 dedicated offshore SAR vessels, meaning that 240 personnel provide offshore coverage. Approximately 600 employees, in a given period, are dedicated to SAR.

In addition to the 2,300 seagoing personnel, 136 are part of the Inshore Rescue Boat Program, Federal Student Work Experience Program (FSWEP).

B. Distress to Rescue
There are many variables that affect the response and outcome of a search and rescue incidents. Below is a generic description of the evolution of a typical distress case.

• A mayday is received by a Marine Communications and Traffic Services centre, a distress flare is sighted, an automatic distress beacon (EPIRB) is detected by satellite or a vessel is declared overdue at their port of call.
• MCTS broadcasts a mayday relay and requests all vessels in the area to proceed and assist the vessel in distress. Masters of all vessels in Canadian waters must respond and provide assistance as per the Canada Shipping Act, 2001.
• The Joint Rescue Coordination Centre (JRCC) tasks the most appropriate primary resources which could include fixed wing aircraft, helicopters, Coast Guard ships or Coast Guard lifeboats. Normally it is a combination of all of the available primary resources that are initially tasked.
• MCTS advises JRCC of “vessels of opportunity” which are in the area and have answered the mayday relay and coordinates communications with them.
• JRCC continues coordination of the response and confirms details including number of people onboard, vessel position accuracy and lifesaving equipment onboard. When possible the vessel’s owner or next of kin are advised.
• A drift prediction is started using specialised software that accounts for winds and currents in the area, and a search plan is developed in case the vessel’s distressed crew has to abandon into the water.
• Once the first resource arrives on scene a situation report is obtained to confirm that all crew members are accounted for and their medical status. There are normally three probable outcomes:
  o All crew are accounted for and safe at which point all other resources are stood down and the JRCC monitors the safe return of the crew to port.
All crew are recovered but some or all have medical issues. In this case primary care will be provided by specially trained Coast Guard rescue specialists or Canadian Forces search and rescue technicians until a medical evacuation can be completed by helicopter or SAR vessel. The primary medical care will be coordinated with emergency medical specialists on shore including advice on the best location to deliver the patient based on diagnosis.

One or more crewmembers are missing. At this point a search plan will be implemented using all available private and government search and rescue resources. Search areas will be assigned to both vessels and aircraft until the search object is found. If the search object is not found the following procedures (excerpts from the Canadian Aeronautical and Maritime SAR Manual) are followed:

The Canadian search and rescue (SAR) System is responsible to search for survivors of SAR incidents. Not locating a survivor at the scene when an aircraft or vessel is found does not alter this obligation. A search will continue until the SAR Mission Coordinator (SMC) determines that there is no longer a reasonable expectation of survivability, that every reasonable effort has been expended and that all leads have been exhausted.

Successful Searches
- When search efforts indicate that danger no longer exists, e.g., the communication search was successful and no problem exists, or the object and/or the survivors have been located and rescued, and all SAR facilities are accounted for, the joint rescue coordination centre (JRCC)/maritime rescue sub-centre shall close the incident and immediately inform the operating agency and any centre, service or facility that has been alerted or activated.

Unsuccessful Searches
- When it has been determined that further search would be to no avail because the area has been adequately searched and all probability areas investigated, or because there is no longer any probability of survival, or for other pertinent reasons, a search reduction should be recommended. Next-of-kin (NOK) should be made aware that search reduction is being sought.

Question 2:
Could you explain the rationale underlying the three main SAR jurisdictions? For example, why is Nunavik split among two of the SAR regions with headquarters in Trenton and Halifax? Please also specify the particular SAR commander in each region.

Response:

A. Rationale Underlying Canada’s SAR Jurisdictions
Canada’s National Search and Rescue Program (NSP) was established in 1986 by the Government of Canada. The Canadian Search and Rescue regions were established according to international agreements and aircraft traffic management zones. The establishment of these zones are a legacy of the search and rescue system, which originates in the air domain. The responsibility for the territory of Nunavik is divided between Joint Rescue Coordination Centres Halifax and Trenton, however it does not have an impact on the response and/or coordination of search and rescue incidents in the area of operation. Canada has robust practices and procedures in place to ensure that there is a coordinated and appropriate response to all SAR incidents irrespective of their geographic location. SAR coordinators have the authority to task any resource(s) irrespective of whether not they are located within their area of responsibility, as the boundaries are seamless to the on water response.
Below are excerpts from CAMSAR describing the division of the Canadian search and rescue region:

**Federal Area of Responsibility**

- For aeronautical and maritime search and rescue (SAR) incidents, the Canadian federal area of responsibility (AOR) is as defined under International Civil Aviation Organization (ICAO) agreements for aeronautical SAR, and as defined under International Maritime Organization (IMO) agreements for maritime SAR.

**Search and Rescue Regions**

- In accordance with the IMO SAR Plan and ICAO Regional Air Navigation Plans, the Canadian federal SAR AOR has been divided into three search and rescue regions (SRRs) for maritime and aeronautical SAR coordination.

**B. Search and Rescue Region Commanders**

**Halifax**
Rear Admiral John Newton
Commander Maritime Forces Atlantic

**Trenton**
Major General David Wheeler
Commander 1 Canadian Air Division

**Victoria**
Rear Admiral Gilles Couturier
Commander Maritime Forces Pacific