



Fisheries and Oceans  
Canada

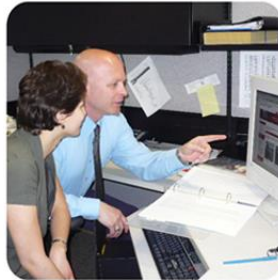
Pêches et Océans  
Canada

Canadian  
Coast Guard

Garde côtière  
canadienne



Safety First, Service Always



# Canadian Coast Guard: Search and Rescue Program

# Presentation Objectives

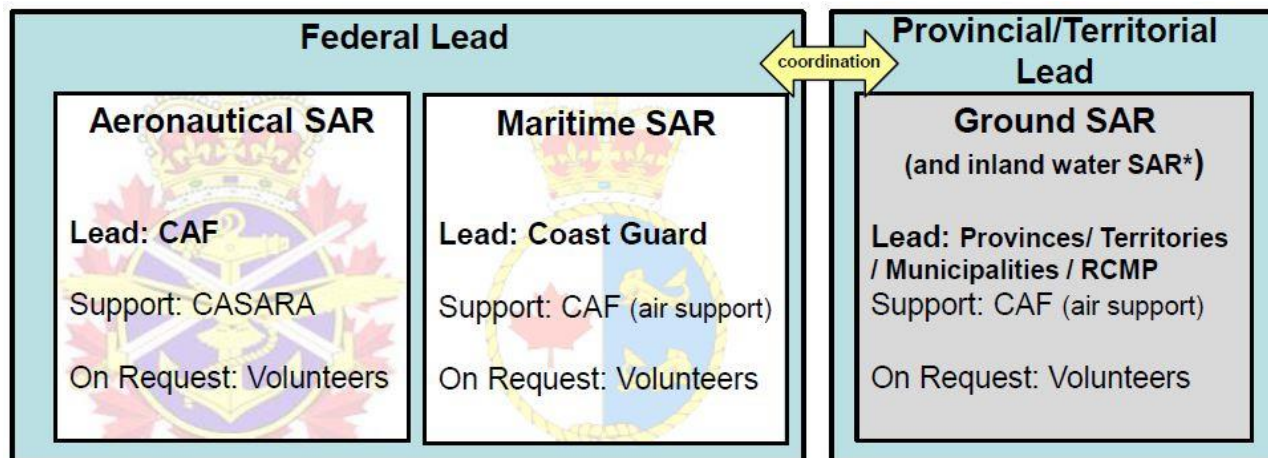


- Explain the current Maritime Search and Rescue (SAR) environment;
- Outline the Canadian Coast Guard (CCG)'s mandate and role in preparing for, coordinating, and responding to Search and Rescue incidents; and,
- Describe challenges and opportunities in Canada's maritime Search and Rescue.

# Search and Rescue Mandate



- In Canada, Search and Rescue is a **shared responsibility** among federal, provincial/territorial and municipal organizations, as well as volunteer organizations. The federal SAR program is led by DND, through the Canadian Armed Forces (CAF). Distinct differences exist between ground, air and maritime SAR.



- Ground:** responsibility falls under the legal authority of the individual provinces and territories who are delegated for operational response to the jurisdictional police services.
- Air:** the primary responsibility for the provision of aeronautical SAR services and effective coordination of both aeronautical and maritime SAR response is assigned to the CAF.
- Maritime:** CCG (mandated through the *Oceans Act* and *the Canada Shipping Act, 2001*) leads the maritime component of the federal SAR system through distress monitoring, and coordination.

# Canadian Area of Responsibility



18 million km<sup>2</sup> area, divided into 3 Search and Rescue Regions



CCG and CAF jointly staff  
**3 Joint Rescue  
Coordination Centres**  
(JRCCs), located in  
Halifax, Trenton, and  
Victoria.

CCG operates a **Maritime  
Rescue Sub-Centre**  
(**MRSC**) in Quebec City for  
additional bilingual  
capacity.

The 3 JRCCs and the MRSC  
operate 24/7 to coordinate a  
joint Royal Canadian Air Force  
(RCAF) / CCG response to  
SAR incidents in areas of  
Federal Jurisdiction.

# Coast Guard Asset locations



## ASSET DISPOSITION / DISPOSITION DES ÉLÉMENTS

As of March 18, 2016, the CCG Fleet consists of:

En date du 18 mars 2016, la flotte de la GCC comprend:

### 116 Vessels / Navires

21 Helicopters / Hélicoptères

#### Western Region / Région de l'ouest

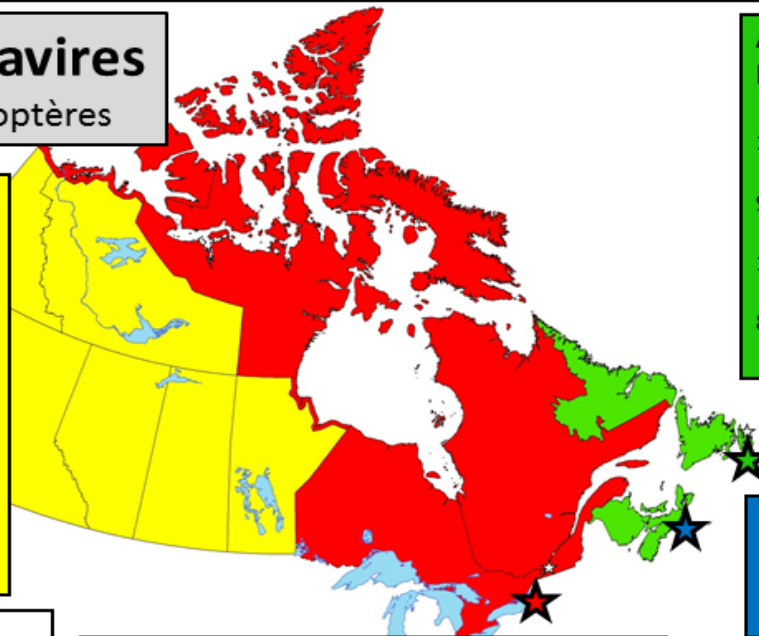
11x large vessels /  
gros navires  
5x small vessels /  
petits navires  
13x SAR lifeboats /  
embarcations de SAR  
3x ACVs /  
aéroglisseurs  
6x helicopters /  
hélicoptères

#### With / avec

2x vessels for disposal /  
navires pour disposition

#### With / avec

0x Helicopters in Ottawa/  
hélicoptères à Ottawa



#### Atlantic Region / Région de l'atlantique

18x large vessels /  
gros navires  
9x small vessels /  
petits navires  
14x SAR lifeboats /  
embarcations de SAR  
8x helicopters /  
hélicoptères

#### College / collège

2x training vessels /  
navires de formation

#### Central & Arctic Region / Région du centre et de l'arctique

14x large vessels / gros navires  
8x small vessels / petits navires  
18x SAR lifeboats / embarcations de SAR  
2x ACVs / aéroglisseurs  
7x helicopters / hélicoptères

#### With / avec

3x vessels under construction /  
navires en construction

# Volunteer SAR Partners



## Volunteer Resources

- Civil Air Search and Rescue Association (CASARA)
- Canadian Coast Guard Auxiliary (CCGA)
- Provincial and Territory Ground SAR teams



- **CCGA**

1,100 vessels and 4,000 volunteers (currently 9 units in Northern Canada)

- **CASARA**

100 teams and 2,534 volunteers

- **Ground SAR Teams**

300 teams and 12,000 volunteers

# Coast Guard Auxiliary - North



- The Canadian Coast Guard's key partner in Maritime SAR, the Coast Guard Auxiliary, operate 11 vessels in 9 locations in northern Canada, with approximately 100 Canadian Coast Guard Auxiliary members

**288-Yellowknife**

**290-Hay River**

**292-Inuvik Marine Rescue**

**344-Cambridge Bay**

**503-Rankin Inlet**

**510-Aklavik**

**523-Pangnirtung**

**525-Kugluktuk**

**532-Tuktoyaktuk**

- CCGA currently has 14 certified trainers in various locations in the Arctic, including Hay River, Yellowknife and Tuktoyaktuk

# Government Commitments: SAR



## Kitsilano

- Minister Tootoo announced re-opening of the Kitsilano Coast Guard Base in Vancouver, BC (December 2015).
  - Key deliverable in national commitment to improving marine safety off Canada's east and west coasts.
  - Budget 2016: \$23.6 million to reopen the Kitsilano Base with enhanced marine emergency response capacity.
- Base was operational May 1, to be fully staffed by May long-weekend with crew on duty 24/7, 365 days a year.

## St. John's Maritime Rescue Sub-Centre (MRSC)

- Budget 2016: options will be developed over the coming year to enhance search and rescue capacity in Newfoundland and Labrador.
- Closed since 2011, creates a complex planning situation.
- A new CCG facility could provide state-of-the-art location while making the best use of public funds.

# Coast Guard Arctic SAR Project



- The objective of the on-going Arctic SAR project is to enhance maritime SAR response capacity throughout the Arctic and ensure that resources and volunteers are properly trained, insured, and tasked through a rescue centre when responding to maritime SAR incidents.



# Current Environment



- There are thousands of recreational, fishing and other commercial boaters operating on Canada's waters daily.
- Inherent risks to lives and property exist when operating a vessels on the water.
- In 2014, there were approximately 6155 maritime SAR incidents. See Annex A for details on specific incident types and numbers.
- In 2014, The Transportation Safety Board of Canada investigated 301 shipping accidents in Canadian waters – Fishing vessels alone accounted for approximately a third of these accidents.
- Internationally, 75\* ships were lost at sea in 2014, of which, Cargo and fishing vessels accounted for more than 50% of those losses



\*Allianz Global Corporate & Specialty Safety and Shipping Review 2015

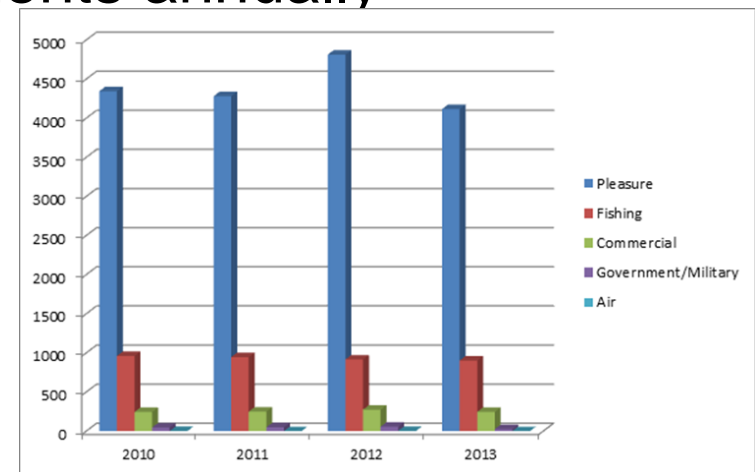
# Who is most at risk?



On average...

- **Pleasure boaters** → **4390** incidents annually
- **Fishing vessels** → **932** incidents annually
- **Commercial vessels** → **254** incidents annually
- **Others**, including government or military vessels and aircraft account for about **46** incidents annually

The table identifies the number of incidents by vessel type. In 2013 over 70% of maritime calls for assistance were related to pleasure boaters. Additionally, over the same period, disabled vessels on average accounted for approximately 50% of calls for assistance.



# Coast Guard SAR Resources



The CCG's ensures that safe, reliable, professionally crewed, and operationally capable vessels, vehicles, and helicopters are available to respond. Our dedicated SAR assets include:

- 40 SAR **lifeboat stations**;
- A **dedicated hovercraft station** (Sea Island/Vancouver, BC) with CCG's only dive team (available 24/7);
- 25 **inshore rescue boats** (IRB's) that maintain a 30 minute or less reaction time during peak season;
- CCG **patrol mode vessels** provide SAR coverage for 6 offshore SAR zones, plus;
- More than 80 multi-tasked vessels and 21 helicopters able to provide additional SAR capacity (secondary SAR resources must achieve a one hour reaction time)



# Program Results



- On an average day the CCG **saves 15 lives** and **assists 52 people** in 27 search and rescue incidents.
- On total average, the JRCCs, combined, **coordinate over 9,200 calls** for assistance per year, of which approx. 6,500 year over year are maritime incidents.
  - Of those, **CCG** responds to an average of over 3,800 calls for assistance annually (about 3,300 are maritime incidents).
  - **CCGA** responds to an average of 1,775 calls annually (about 1,600 are maritime incidents.)
- CCG resources are tasked, mobilized and depart (reaction time) for an incident within 30 minutes or less approx. 99% of the time.

**EX:** Through the combined efforts of all organizations involved, the federal SAR program saves, on average, 97% of lives at risk – one of the best records in the world.

# Key Messages



Maritime

- CCG's role in search and rescue is to save and protect lives in the maritime environment.
- The Government of Canada is committed to ensuring the Coast Guard is staffed and equipped to respond to people in distress in Canadian waters 24 hours a day 365 days a year

Coordinated

- CCG is investing in fleet renewal including 15 new SAR lifeboats
- Canadians benefit from a system that includes federal, provincial, municipal and volunteer partners working in collaboration
- The CCG works closely with the Royal Canadian Air Force (RCAF) and Coast Guard Auxiliary to ensure an effective and efficient response to all search and rescue incidents
- CCG and the RCAF established the Search and Rescue Operations Governance Committee to ensure strong oversight of the federal SAR system

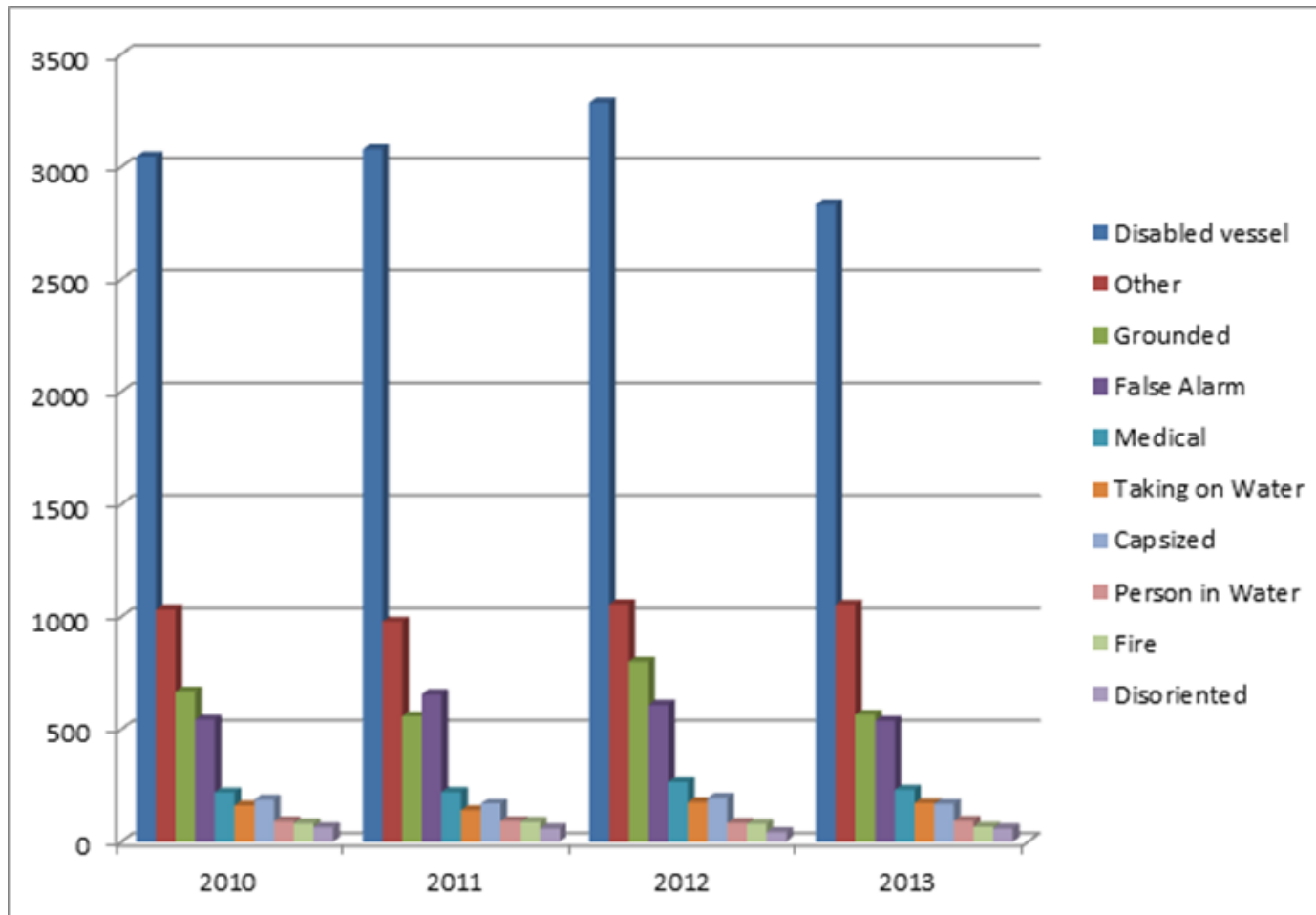
Arctic

- CCG recently received funding to support immediate expansion of the Canadian Coast Guard Auxiliary (CCGA) in the Arctic, as well as internal resources to complete a review of maritime Arctic SAR requirements.

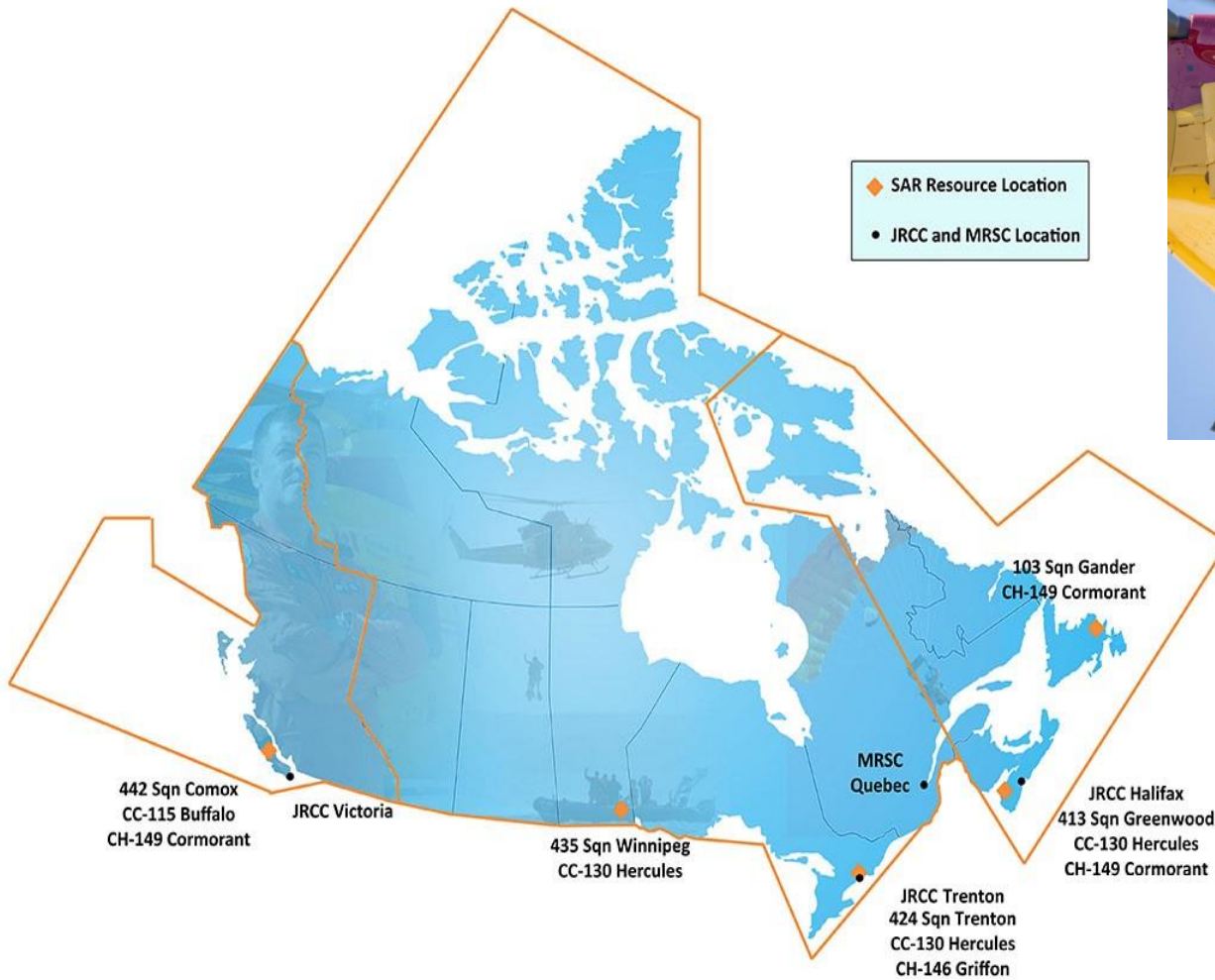
# Annex A: Maritime SAR Incidents by Cause



Maritime SAR Incidents by Incident type/Cause



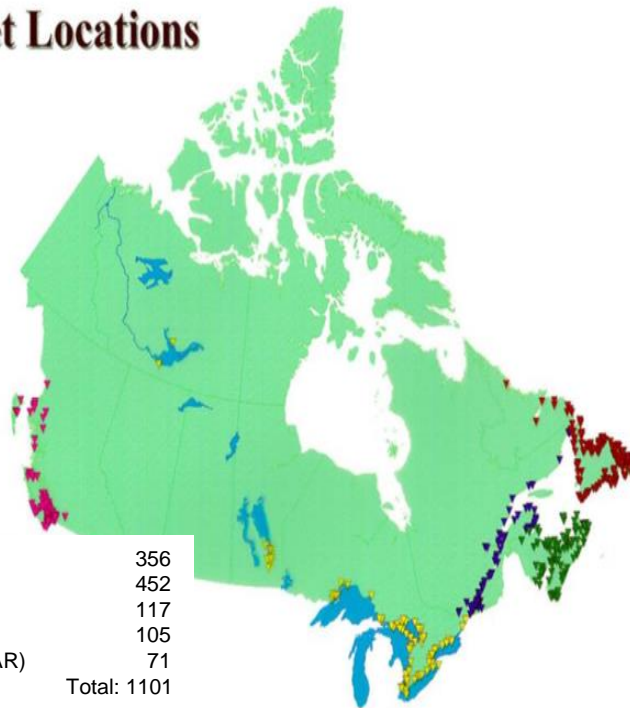
# Annex B: RCAF Asset locations



# Annex C: CCG-Auxiliary (regions & unit locations)



## CCGA Asset Locations



The CCG funds 5 CCGA regions through a contribution program.

The CCGA operates a fleet of over 1,100 vessels, many of which are owner-operated. Some regions however, rely extensively on community (SAR Dedicated) vessels.

CCGA \*assets are strategically located between CCG assets where maritime traffic is concentrated and marine risks are high.

CCGA volunteers are experienced mariners who are familiar with the local environment and typically respond to more than 25% of all maritime incidents in Canada.

\*Asset map is from 2013. There are currently 9 CCGA units operating in the Arctic region.

# Annex D: SAR Response – Levels of Service



## CCG Primary Maritime SAR Assets 24/7/365

30 minute or less reaction time standard  
99% of the time - tasked to departing station



Usually underway in less than 15 minutes; often already on the water

## CAF Primary Air SAR assets Unit 24/7/365

30 minutes task to airborne during high readiness hours

(2014 National average 18 minutes)

2 hours task to airborne during standard hours

(2014 National average: 1 hr 2 minutes)



# Annex E: Canadian SAR Roles



**National SAR Secretariat (PS)** – provide advice and enhance the provision of an effective and affordable SAR service in Canada by facilitating the National SAR Program through the Interdepartmental Committee Search and Rescue (ICSAR) and the Ground Search and Rescue (GSAR) Council.

**Canadian Coast Guard (CCG)** - responsibility for the provision of the maritime component of the federal SAR system rests with the Coast Guard, and includes monitoring of marine distress communications, coordination and response functions - as assigned through the *Oceans Act*.

**Canadian Armed Forces (CAF)** – responsible for the provision of aeronautical SAR services and the effective operation of the co-ordinated aeronautical and maritime SAR response system.

**Transport Canada (TC)** -TC acts to enforce Canadian legislation and international rules intended to ensure safety of life at sea and protect the maritime environment including prevention-based programs and vital information for users and builders of recreational boats

**Provinces and Territories Emergencies Management Organizations (EMO)** – responsibility for the provision of inland SAR coordinated through the Royal Canadian Mounted Police (RCMP) and Provincial /Territorial Police services.