

Canadian Coast Guard
Safety and Environmental Response Systems



2001

Maritime Search and Rescue Incidents
Annual Report



Fisheries and Oceans
Canada

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Canada

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Safety and Environmental Response Systems

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Canadian Coast Guard
Safety And Environmental Response Systems
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INTRODUCTION

This publication provides information on all of the SAR incidents that have occurred within the Department of Fisheries and Oceans area of responsibility. It also includes SAR incidents in areas of international responsibility where Canadian federal assistance was required.

These statistics were generated from data in the computerized SAR database (SISAR) maintained at Coast Guard Headquarters. It was compiled with information obtained from reports originating from Joint Rescue Co-ordination Centres and Maritime Rescue Sub-Centres (JRCCs and MRSCs), and other information sources. In 1994, a Memorandum of Understanding was signed between the Canadian Forces Air Command (AIRCOM) and the Canadian Coast Guard (CCG) to implement SISAR in the JRCCs and MRSCs. The extra data captured by AIRCOM is reflected in this summary. The selection of statistics to display in this publication was based on the frequency of past use.

The source of information for these reports is continually being improved, in order to achieve a more in-depth understanding of the relevant underlying factors and the role and effectiveness of participating units in resolving incidents of all types.

In line with the government's Management for Results initiative, and the SAR Program's Results Based Management Accountability Framework, the scope of the data collected has changed. We have added two variables – SAR Coverage and Reaction time. SAR Coverage is the amount of time a vessel assigned to primary SAR duties is in the planned area; future measures will add more criteria. Reaction time is the difference in time between when a SAR resource is tasked and when the resource departs for the tasking. Resources at sea will have zero as this measure. Performance Measurement is an iterative process and will improve over time.

The statistics are not intended to be an all-inclusive description of Coast Guard Search and Rescue activities.

TECHNICAL TERMS AND ACRONYMS

Incidents will be classified based on type and level of severity:

M - Maritime Incidents (M1, M2, M3, M4)

A – Aeronautical Incidents (A1, A2, A3, A4)

H – Humanitarian Incidents (H1, H2, H3, H4)

U – Unknown Incidents (U4)

1. Distress incidents:

A vessel or a person is threatened by grave and imminent danger and requires immediate assistance. (Life-threatening situation was judged to be present or close at hand at some point during the incident);

2. Potential Distress incidents:

The potential exists for a distress incident if timely action is not taken; ie., immediate responses are required to stabilize a situation in order to prevent distress;

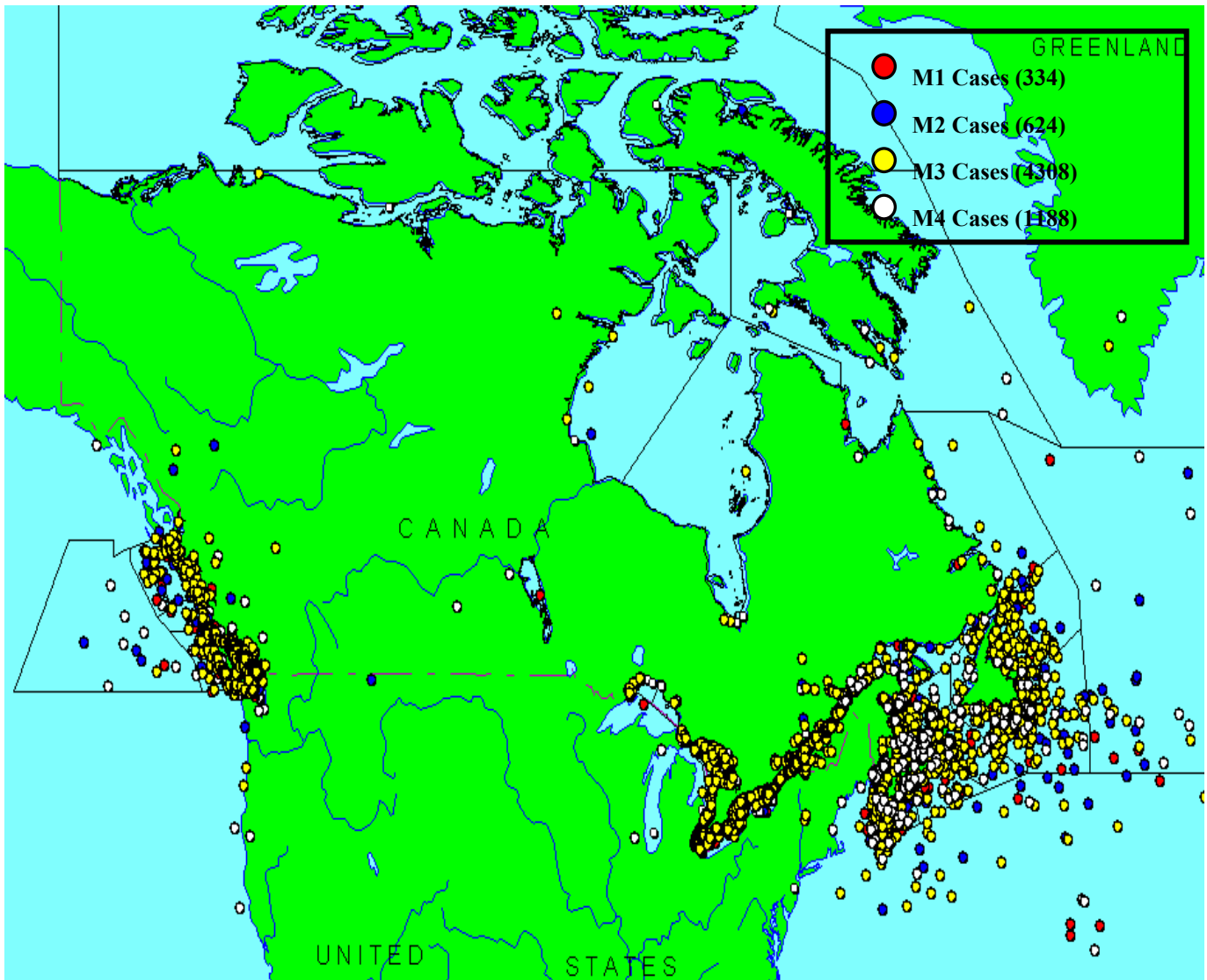
3. Incidents resolved in the uncertainty phase (Non-Distress):

No distress or perceived appreciable risk to life apparent. (General calls for assistance);

4. False alarms and hoaxes:

Situations that cause the SAR system to react which proves to be unjustified or fabricated, such as a mistaken report of a flare.

SUMMARY OF SAR INCIDENTS – 2001 – CHART



Total Maritime Incidents (M1 + M2 + M3 + M4) = **6454**

SUMMARY OF SAR INCIDENTS – 2001

Incident Total – **8235** recorded by Coast Guard SAR authorities. (M+A+H+U)

Maritime Incidents (M1 + M2 + M3 + M4) = 6454

- M1 – Distress Incidents – **334** representing **5.17%** of maritime incidents.
- M2 – Potential Distress Incidents – **624** representing **9.67%** of maritime incidents.
- M3 – Incidents Resolved in the Uncertainty Phase – **4308** representing **66.75%** of maritime incidents.
- M4 – False Alarms and Hoaxes – **1188** representing **18.41%** of maritime incidents

Other Incidents (A + H + U) = 1781

Aeronautical – **729**

Humanitarian – **625**

Unknown – **427**

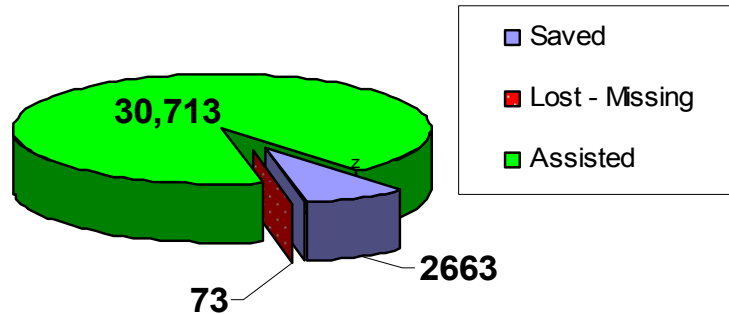
- Distress Incidents – **325** representing **18.25%** of other incidents.
- Potential Distress Incidents – **229** representing **12.86%** of other incidents.
- Incidents Resolved in the Uncertainty Phase – **304** representing **17.07%** of other incidents
- False Alarms and Hoaxes – **923** representing **51.82%** of other incidents.

PEOPLE ASSISTED IN 2001

Maritime Incidents

Lives at Risk (M1 and M2)

- Lives Saved – **M1** – 829
M2 – 1834
Total – 2663
- Lives Lost & Missing:
M1 Total – 73
- People Assisted (M3 and M4)
M3 – 13,747
M4 – *14303 (see note)



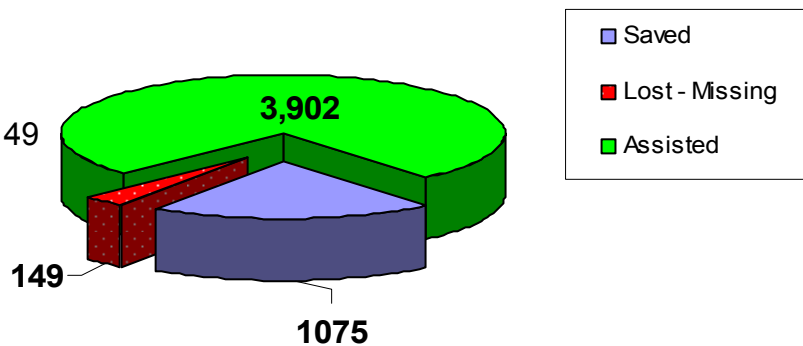
* 2001 figure (14,303) includes two M4 incidents involving Military vessels (Aircraft Carriers) with 6275 persons onboard for each incident. Excluding both of these incidents, the total for M4 People Assisted for 2001 would be 1753. This figure would be in-line with historic trends.

Total people assisted, including general calls for assistance – 30,713 (M1, M2, M3 and M4)

Other Incidents (A, H and U)

Lives at Risk (A1, A2, H1, H2)

- Lives Saved – **A1 + H1** – 403
A2 + H2 – 672
Total – 1075
 - Lives Lost – **A1 + H1 Total** – 149
- People Assisted
- A3** – 2142
 - A4** – 370
 - H3** – 267
 - H4** – 48



Total people assisted, including general calls for assistance – 3902

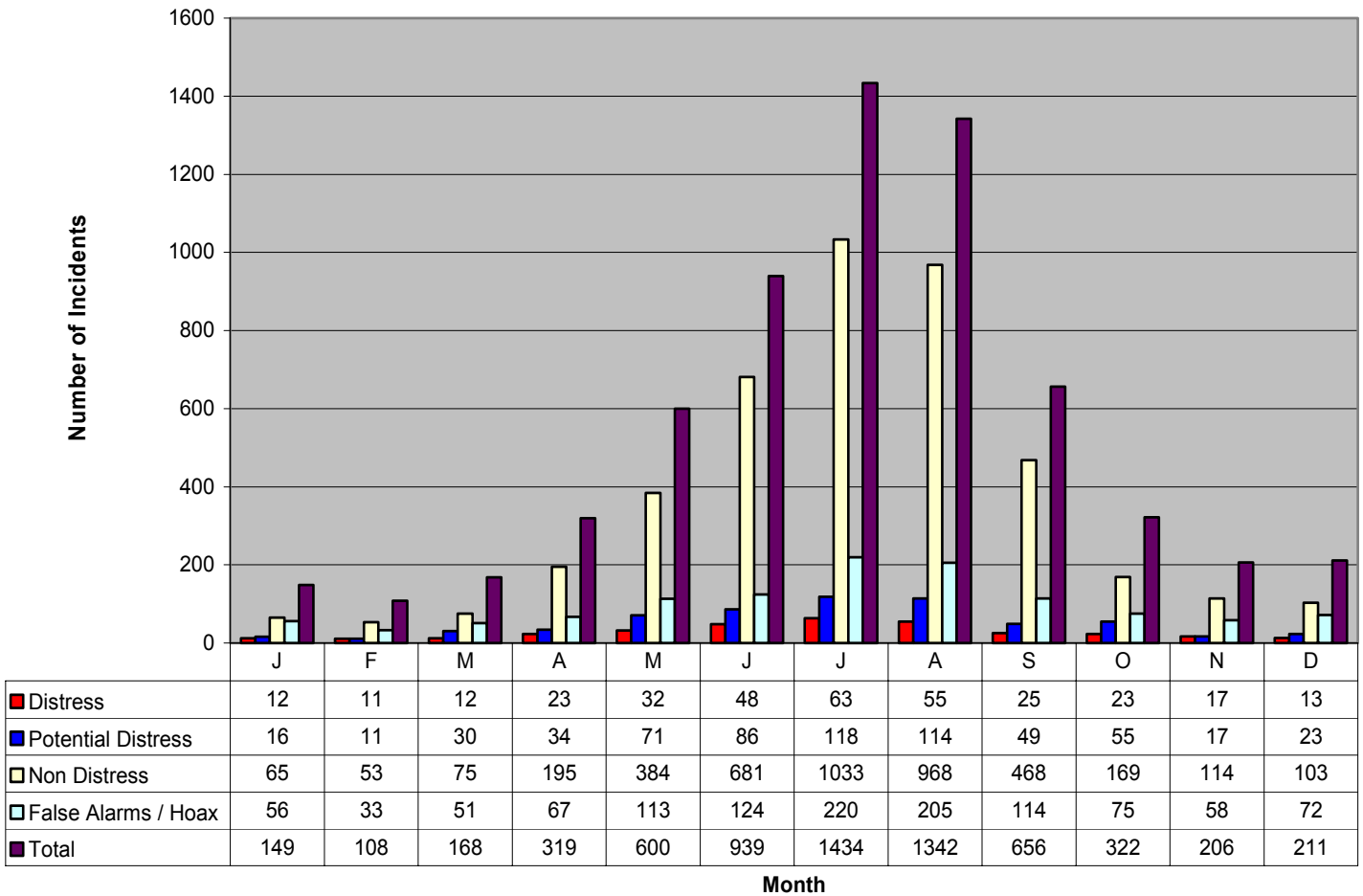
**TABLE 1 - TOTAL NUMBER OF LIVES SAVED AND LIVES LOST
(M, A, H-1 & H-2 INCIDENTS).**

	SAVED	LOST / MISSING
MARINE	2663	73
AERONAUTICAL	555	66
HUMANITARIAN	520	83
TOTAL	3738	222



2001 MARITIME INCIDENTS BY MONTH

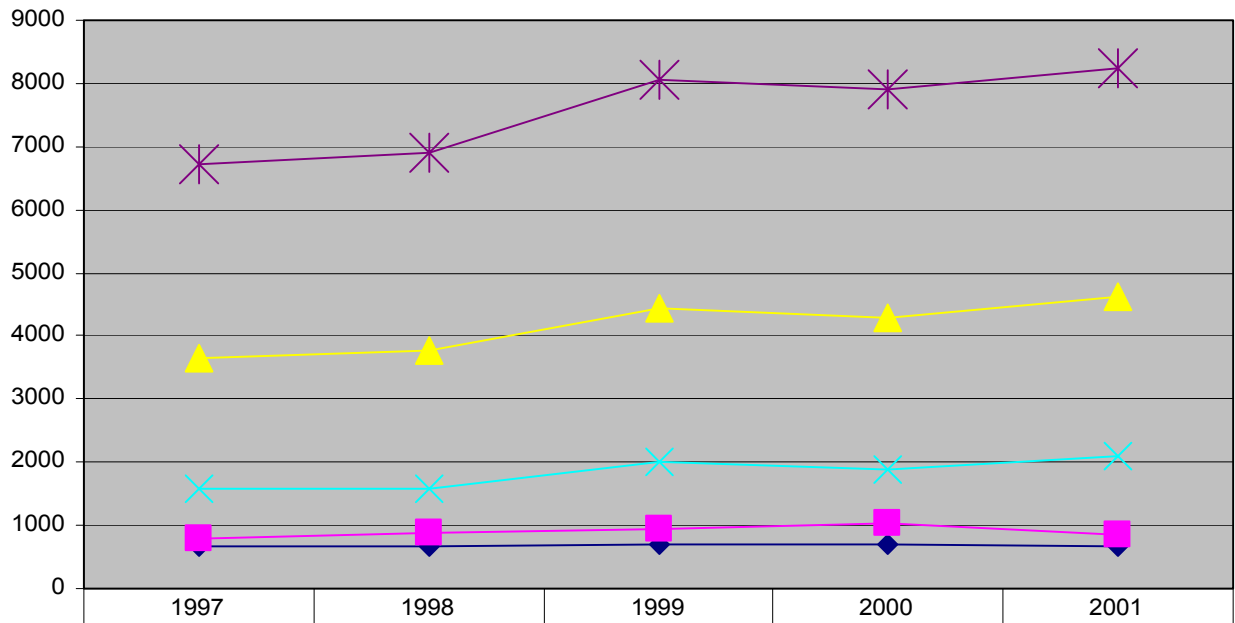
CHART 1 – NUMBER OF INCIDENTS PER MONTH (M1, M2, M3 AND M4)



Total Maritime Incidents (M1 + M2 + M3 + M4) = **6454**

5 YEAR TREND

CHART 2 - TOTAL NUMBER OF SEARCH AND RESCUE INCIDENTS (M,H,A & U)



◆ Distress	684	681	697	707	659
■ Potential Distress	799	885	929	1030	853
▲ Non-Distress	3638	3762	4430	4286	4612
× False Alarm/Hoax	1596	1589	2003	1885	2111
* Total Incidents	6717	6917	8059	7908	8235

Note:

The number of False Alarms / Hoaxes cases increased by 26% or 414 (M4) cases between 1998 and 1999. This increase is attributable to the implementation of GMDSS data in 1999.

PERFORMANCE MEASUREMENT

The purpose of Performance Measurement is to measure or enhance the measurement of performance in DFO, track and monitor results, promote the use of performance information in our every day decision-making, and report on the achievement of commitments, priorities and objectives to Senior Management, Parliament and to DFO's clients.

In order to do this for SAR, a number of performance areas were identified. In the following section we will define those performance areas, the target, how each was measured, and the results.

As this is a relatively new practice, there are a couple of performance areas which cannot be reported on as of yet due to unavailability of information. We will endeavour to collect data on those areas in order to be able to report on them in the future.



A. OUTCOME: MINIMIZE LOSS OF LIFE AND INJURIES

The objective of the SAR System is to save 100% of Lives at Risk in Distress and Potential Distress.

Lives at Risk, including **Lives Saved** and **Lives Lost**, are counted in **Distress** and **Potential Distress** incidents only. All other incidents are lives assisted only.

This is defined as the Lives saved versus the lives at risk

The International definition of lives at risk, lives lost, and lives saved is slightly different to that used in Canada. The International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, Volume I, paragraph 5.6.9 states:

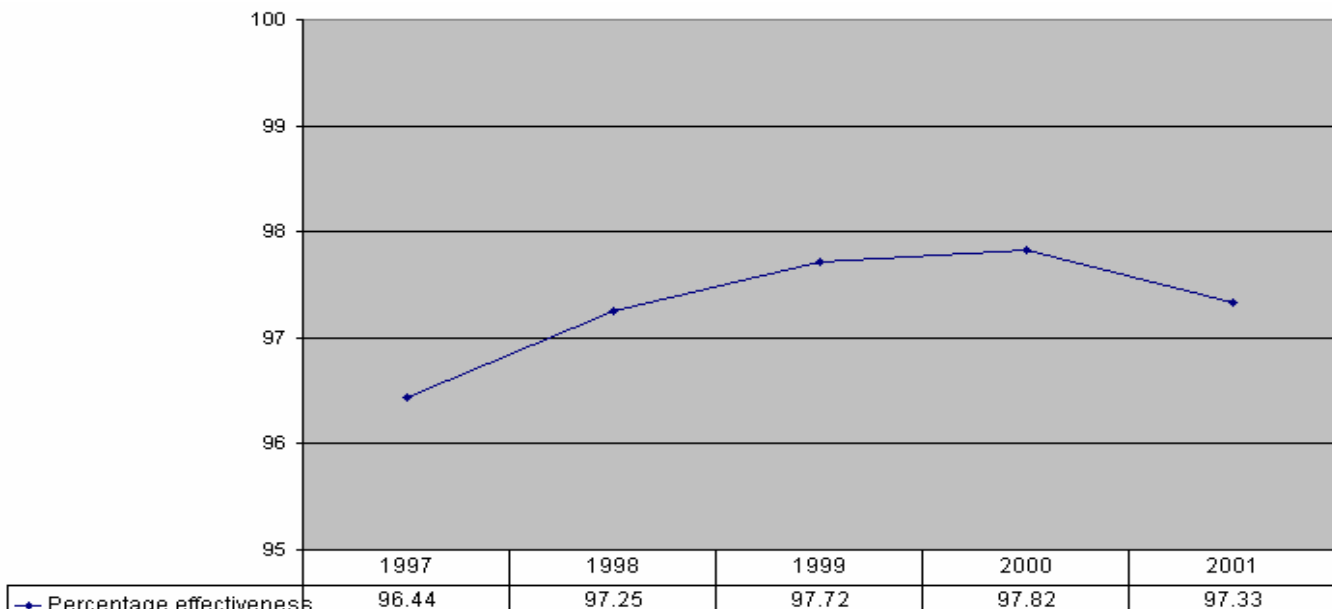
“ Lives lost before SAR system notification were not saveable; therefore, they are excluded from the life-saving effectiveness measure. Lives lost after notification reflect the potential number of additional lives that may have been saved. Studies suggest that about one third of the deaths that occur after SAR system notification happen soon thereafter before help can arrive, or due to such serious injury or sickness that saving life was not possible. The remaining lives lost may be attributed to a less than optimal SAR system.”

The Canadian system measures all lives lost, not just those lost after notification of the incident. We feel that lives lost, even before notification, indicate the effectiveness of the SAR system by demonstrating a level of prevention, as well as a level of response. The established SAR Program level of service is 90%.

Nationally, **97.33 %** percent of lives at risk were saved in the year 2001 (Maritime incidents only). The five year average is **97.31%**.

The five year trend for the SAR system effectiveness is as follows:

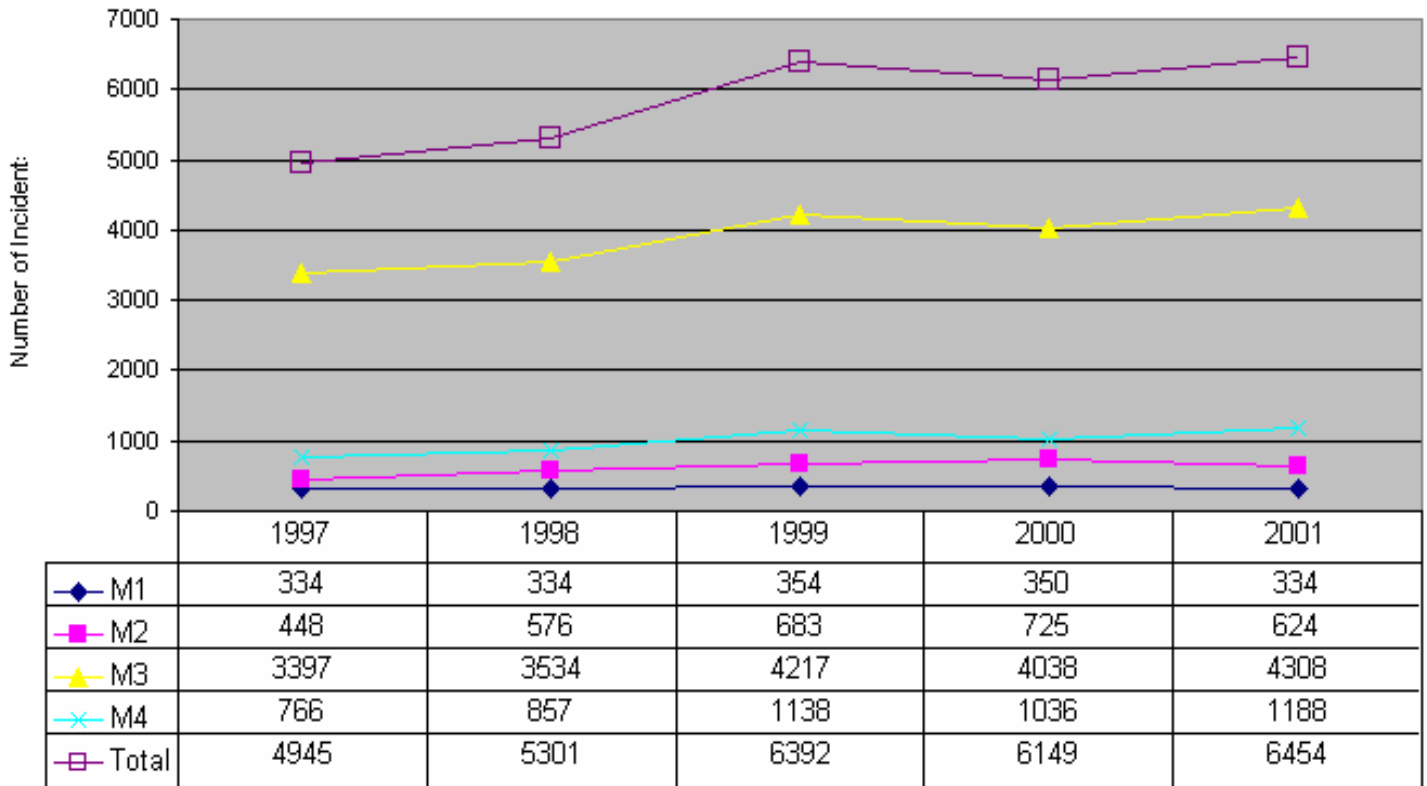
CHART 3 – SAR SYSTEM EFFECTIVENESS PER YEAR (MARITIME SAR INCIDENTS)



B. OUTCOME: NUMBER AND SEVERITY OF MARITIME SAR INCIDENTS.

This will be measured by the number of incidents and the distribution between M1, M2, M3, and M4 type incidents over five (5) years.

CHART 4 – NUMBER AND SEVERITY OF MARITIME SAR INCIDENTS.

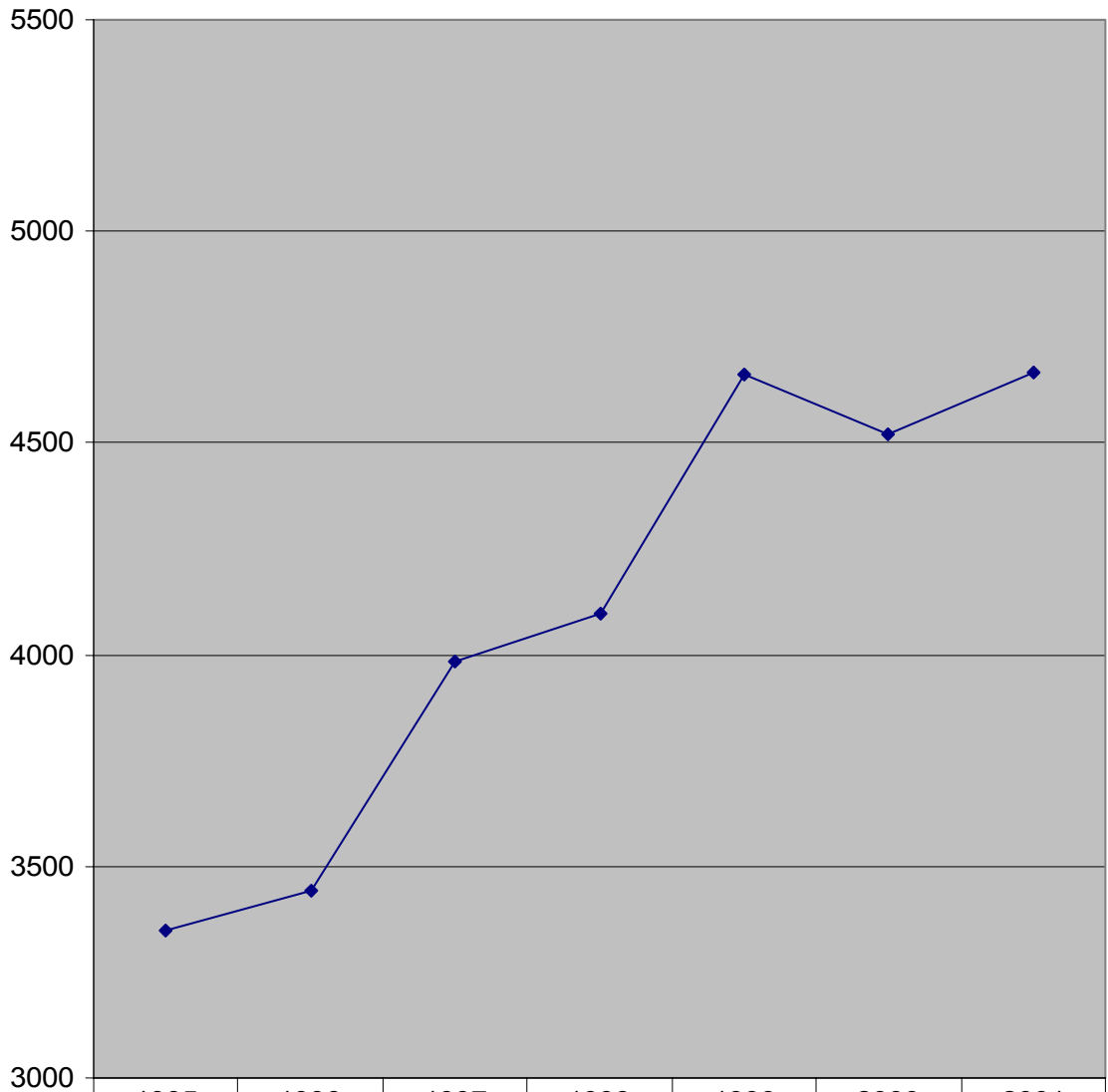


Note: Refer to note in CHART 2 – FIVE YEAR TREND – re: GMDSS implementation in 1999.

C. OUTPUT: CCGA AUXILIARY INVOLVEMENT

The Canadian Coast Guard Auxiliary (CCGA) is a highly effective volunteer organization that assists the Coast Guard in SAR response and prevention activities. The involvement of the CCGA in the National SAR Program is measured as follows:

CHART 6 - NUMBER OF CCGA MEMBERS:



# of CCGA Members	3348	3443	3986	4097	4663	4523	4666
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CHART 7 - NUMBER OF CCGA VESSELS

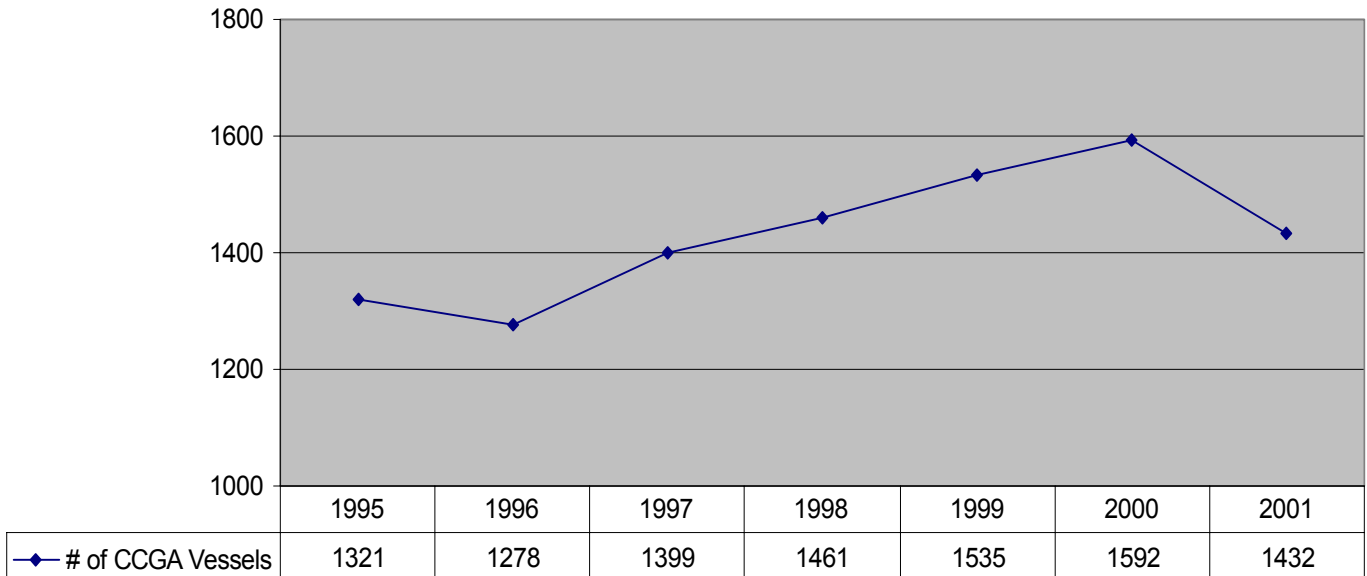
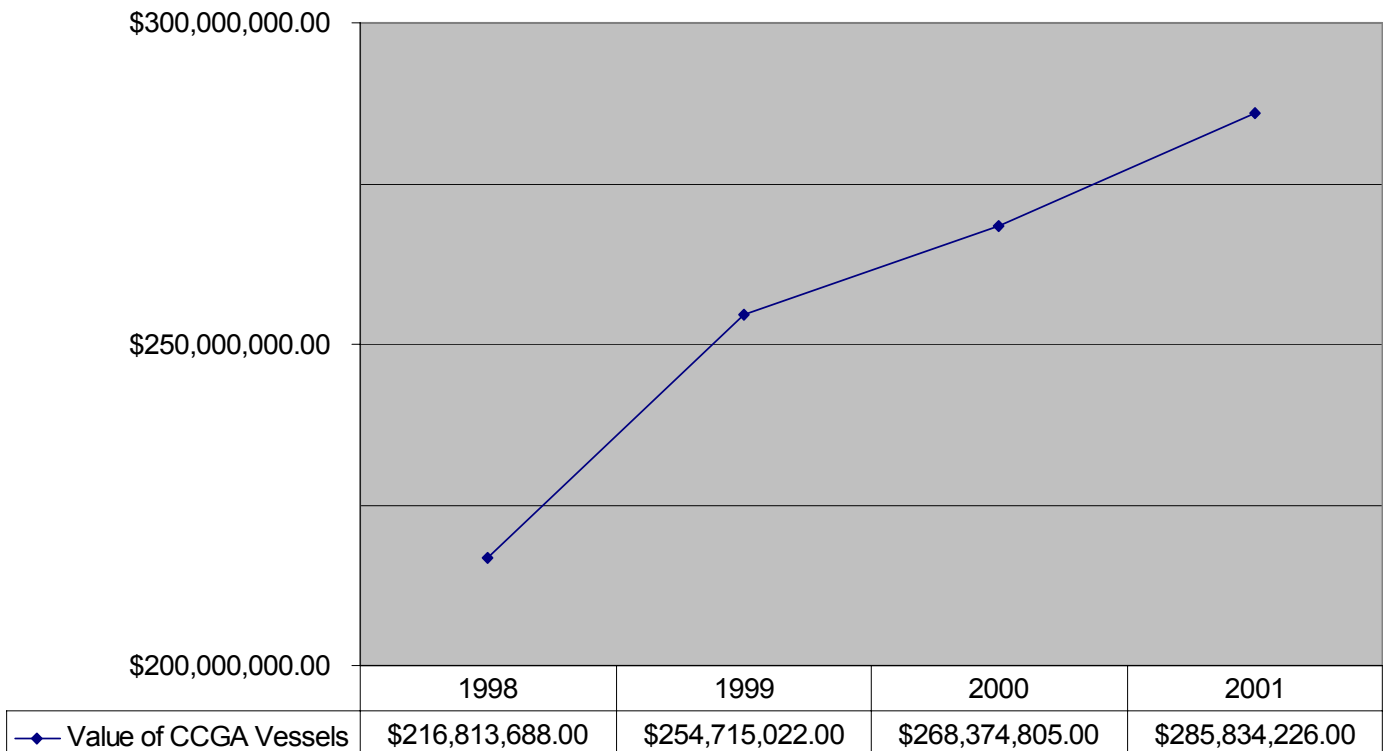


CHART 8 - VALUE OF CCGA VESSELS



NOTE: As a result of CCGA-Pacific's Fleet Modernization efforts in 2001, a number of CCGA vessels were dis-enrolled. Consequently, the number of vessels in CCGA Pacific's Fleet decreased (CHART 7).

During this same time period, CCGA memberships increased in Newfoundland and Maritimes, which included a significant number of high-valued commercial fishing vessels. As a result, nationally the number of CCGA vessels decreased, but the overall value of the CCGA fleet increased. (CHART8).

CHART 9 - NUMBER OF PLEASURE CRAFT COURTESY CHECKS (PCCCS) BY CCGA

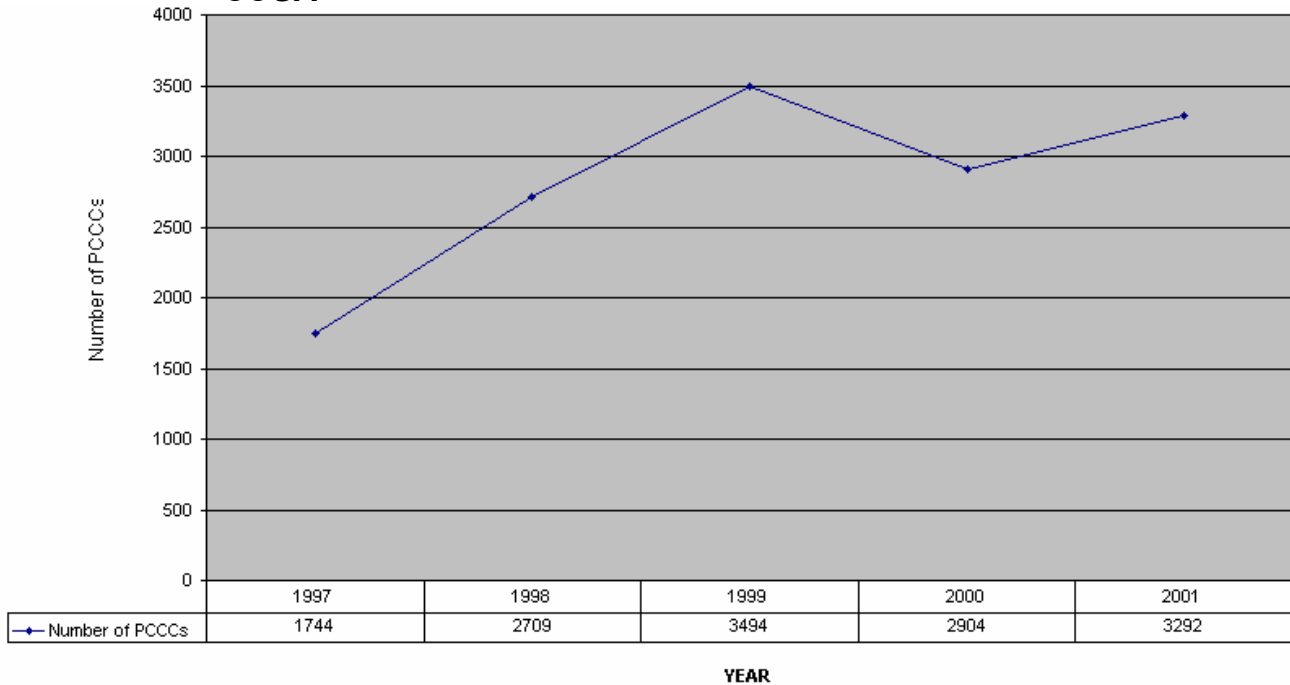
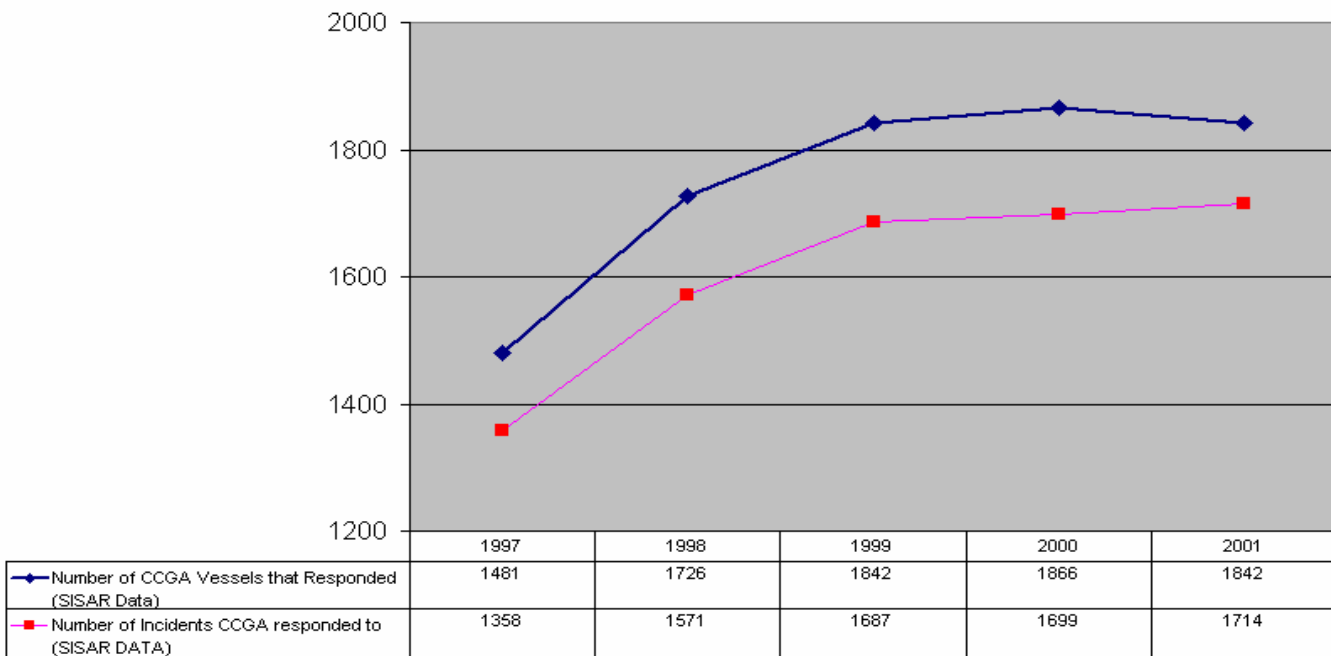


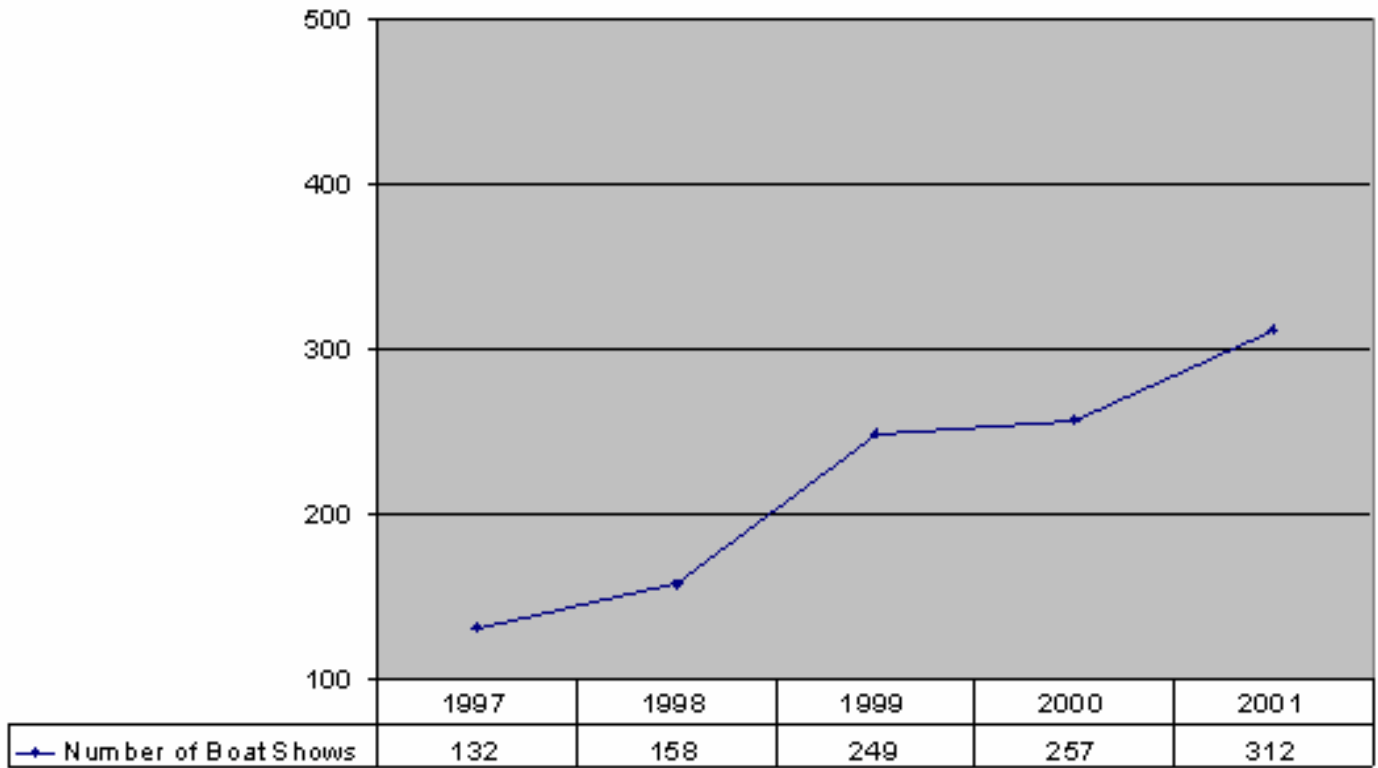
CHART 10- NUMBER OF TASKINGS OF CCGA



Note: A SAR tasking is defined as a request for a vessel or aircraft to render assistance during a SAR incident. In some instances, more than one vessel/aircraft may be actioned to render assistance to an incident. Therefore, the number of vessels that responded to assist may be greater than the actual total number of incidents.

In 2001, there were a total of 6454 Maritime SAR incidents. During this time period, CCGA vessels were tasked a total of **1842** times to **1714** incidents. The CCG acknowledges the CCGA's valuable contribution to the SAR System.

CHART 11- NUMBER OF BOATSHOWS ATTENDED BY CCGA



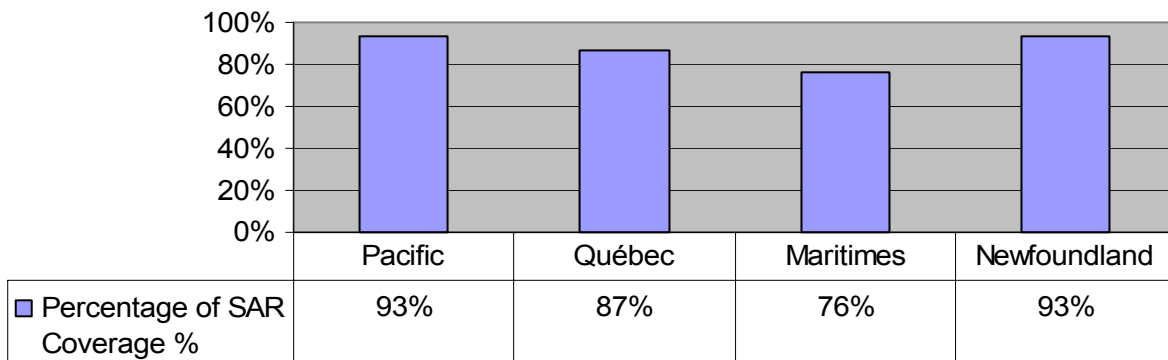
D. OUTPUT: SAR COVERAGE

The target for SAR Coverage is 100%. This is currently measured by the number of days each month, a resource that is assigned to as primary SAR, is in the planned area.

As we have just begun tracking this, a 5 year average will be reported when the data is available. The data only applies to CCG vessels providing Primary Patrol-Mode SAR coverage. In the future we will expand our reporting to cover CCG vessels providing Primary Station-Mode SAR coverage as well. Nationally, our SAR Coverage is 87.00%.

This is broken up regionally as follows:

CHART 12 – REGIONAL PRIMARY SAR COVERAGE BY CCG PATROL-MODE VESSELS.

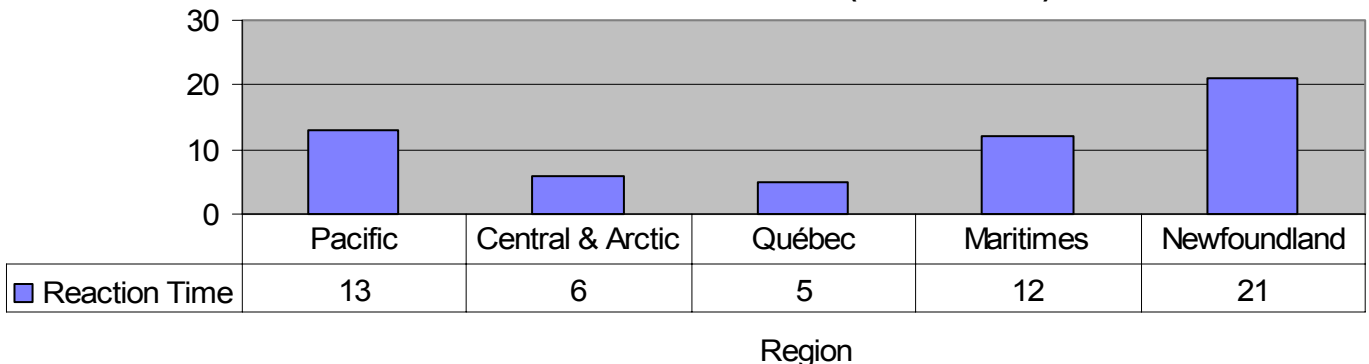


E. OUTPUT: SAR REACTION TIME

Reaction time is defined as the difference in time between when a SAR resource is tasked and when the resource departs for the tasking. All primary SAR vessels are required to have a maximum reaction time of 30 minutes. The national average reaction time is 11.4 minutes.

Regionally, the average reaction time is broken up as follows:

CHART 13 – AVERAGE REACTION TIME BY REGION (IN MINUTES)



VESSELS ASSISTED - TYPES & CAUSES OF MARITIME INCIDENTS

TABLE 2 - MARITIME INCIDENTS – NATIONALLY (M1, M2, M3, AND M4)

Type	# Vessels	%	Lives Saved	Lives Lost/Missing	Most Common Incident Type
Pleasure Craft					
Personal Watercraft	126	2.96	35	1	Disabled
Canoe/Kayak	218	5.11	132	8	Capsized
Open Boat	242	5.68	125	1	Disabled
Motorcraft	2705	63.47	789	13	Disabled
Sailcraft	908	21.3	247	6	Disabled
Sailboard	63	1.48	21	0	Disabled
Total Pleasure Craft	4262	100	1349	29	
Fishing Vessels					
Fishing Vessel GT>15 GRT	653	47.39	376	4	Disabled
Fishing Vessel GT<15 & >12.2m	209	15.17	96	6	Disabled
Fishing Vessel GRT<15 & 8.1m to 12.1m	410	29.75	146	2	Disabled
Fishing Vessel GRT<15 & 0 to 8.0m	106	7.69	30	7	Disabled
Total Fishing Vessels	1378	100	648	19	
Commercial (Non-Fishing)					
Commercial	286	32.8	605	15	Medical
Government	48	5.5	21	3	Medical
Other	538	61.7	40	7	False Alarm
Total	872	100	666	25	
Total: Vessels Assisted/Lives Saved/Lost (Pleasure+Fishing+Commercial)	6512	100	2663	73	

Note: Some maritime SAR incidents involve more than one vessel assisted, thus total vessels assisted is greater than total of maritime incidents (under Section Summary of SAR Incidents 2001).

TABLE 3 - TYPES OF MARITIME INCIDENTS

Total number of Maritime Incidents in 2001 = 6454

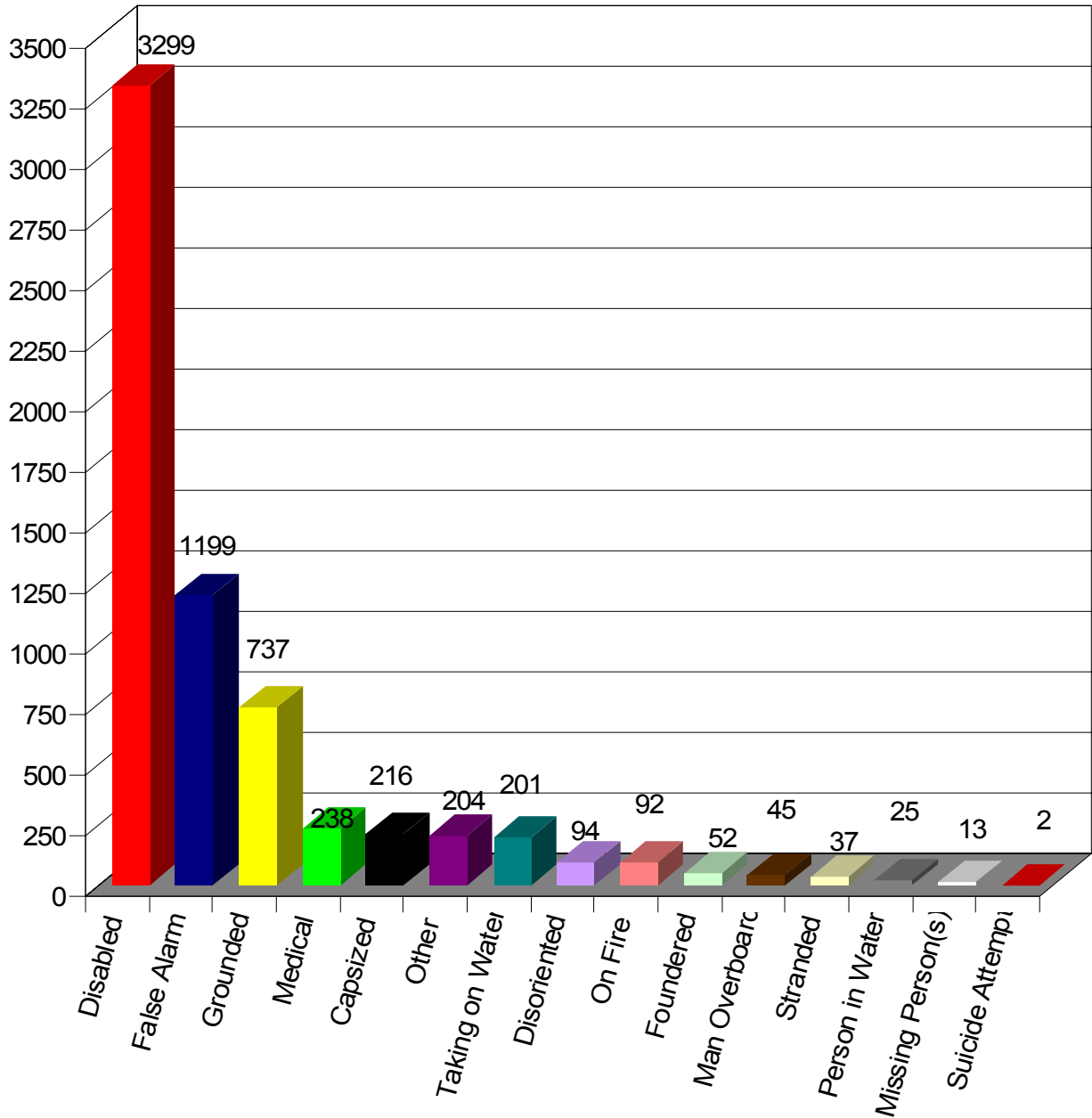


TABLE 3A - TYPES OF MARITIME INCIDENTS IN ORDER OF FREQUENCY

Note:

Types of Maritime Incidents (i.e. M1, M2, M3, and M4) are reported in order of most frequent to least frequent in occurrence.

Incident Type	Total	%	Total Saved	Total Lost & Missing
Disabled	3299	51.12%	637	0
False Alarm	1199	18.58%	0	0
Grounded	737	11.42%	244	0
Medical	238	3.69%	225	5
Capsized	216	3.35%	325	24
Other	204	3.16%	295	6
Taking on Water	201	3.11%	401	1
Disoriented	94	1.46%	14	0
On Fire	92	1.43%	299	0
Foundered	52	0.81%	112	11
Man Overboard	45	0.70%	50	18
Stranded	37	0.57%	24	0
Person in Water	25	0.39%	30	5
Missing Person(s)	13	0.20%	5	3
Suicide Attempt	2	0.03%	2	0
	6454	100.00%	2663	73

TABLE 4 - CAUSES OF MARITIME INCIDENTS IN ORDER OF FREQUENCY

Note:

Causes of Maritime Incidents (M1, M2, M3, and M4) are reported in order of most frequent to least frequent in occurrence

In order of most to least frequent	TOTAL	%
Mechanical Failure	2424	37.56%
Unknown	702	10.88%
Navigational Error	455	7.05%
Mistaken Belief	443	6.86%
Other	424	6.57%
Weather	348	5.39%
Out of Fuel	271	4.20%
Propeller Fouled	165	2.56%
Electrical Failure	162	2.51%
Lack of Knowledge	153	2.37%
Adrift (No POB- <i>Persons onboard</i>)	134	2.08%
Illness	132	2.05%
Accidental Activation	118	1.83%
Failure to Report	101	1.56%
Injury	85	1.32%
Hull/Rigging Failure	70	1.08%
Collision with Object	49	0.76%
Hoax	41	0.64%
Fatigue	33	0.51%
Ice	33	0.51%
Tides/Currents	29	0.45%
Suspected Drug/Alcohol	22	0.34%
Overload/Stability	20	0.31%
Dangerous Piloting	16	0.25%
Collision with Ship	15	0.23%
Suicide or Attempt	6	0.09%
Poor Maintenance	2	0.03%
Cargo Shift	1	0.02%
	6454	100.00%

SAR TASKING PROFILE

In 2001, 9076 taskings were initiated to respond to 8235 SAR incidents, which included 6454 maritime incidents. A SAR tasking is defined as a request for a vessel or aircraft to render assistance during a SAR incident. More than one vessel/aircraft may be actioned to render assistance to an incident.

CHART 14(A) - 2001 SAR TASKING PROFILE BY DISTRIBUTION OF ALL RESOURCES FOR MARITIME INCIDENTS ONLY (M1, M2, M3, M4)

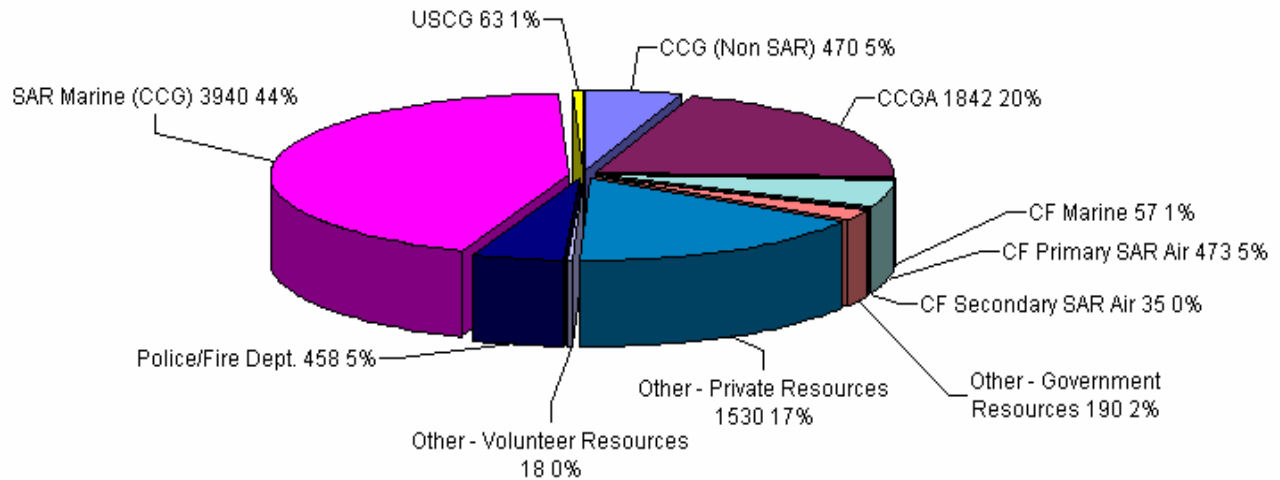


CHART 14(B) - 2001 SAR TASKING PROFILE BY DISTRIBUTION OF ALL RESOURCES FOR NON-MARITIME INCIDENTS (A, H, U)

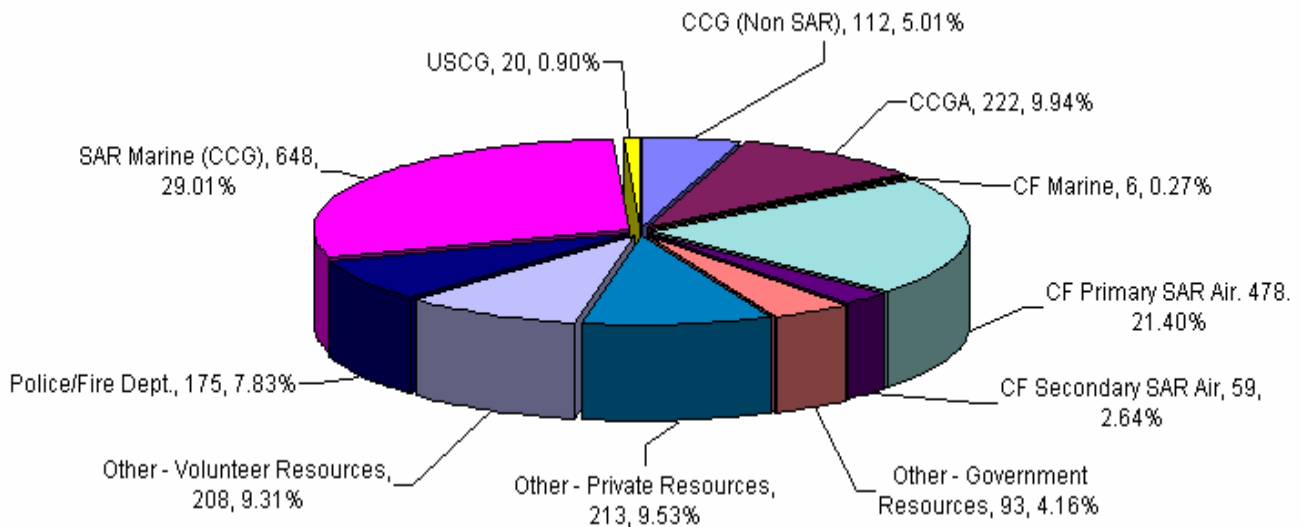


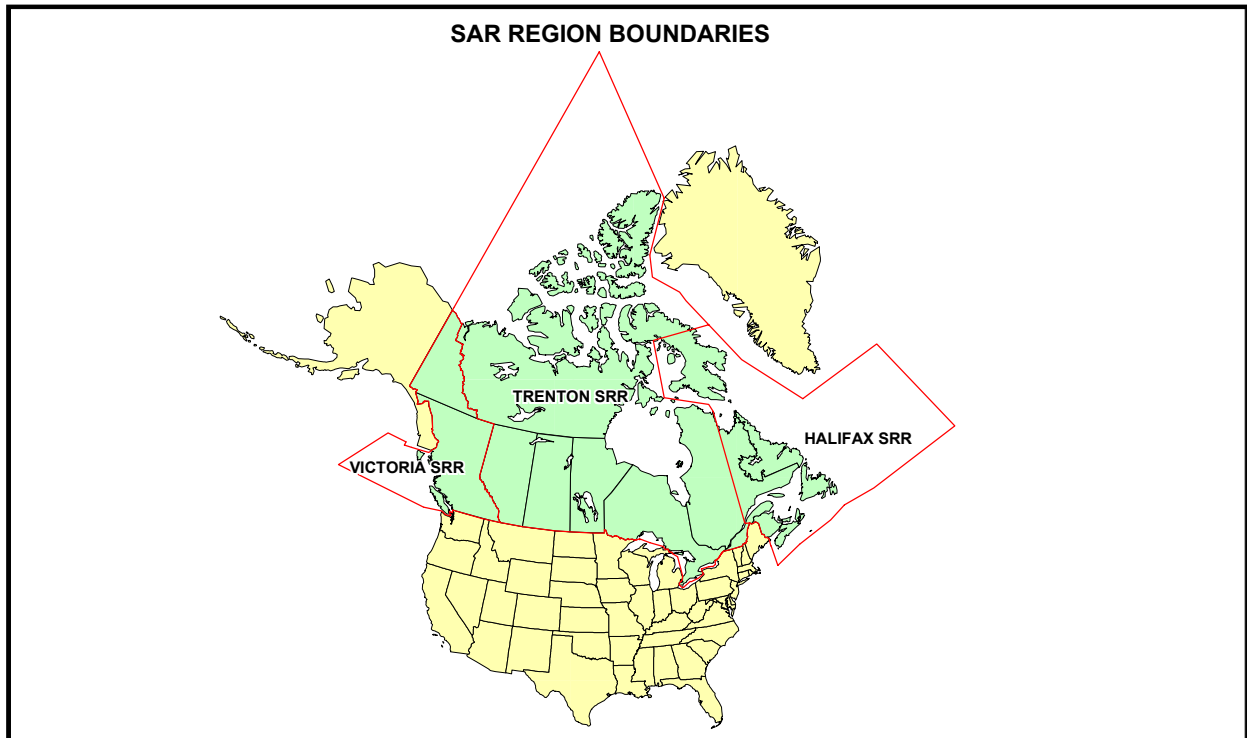
TABLE 5 - SAR TASKING PROFILE DISTRIBUTION OF CCG & DFO RESOURCES

Resource Vessel Type	Description	# of Taskings	% of Taskings
IRB	Inshore Rescue Boat	1083	21.64%
Lifeboats (Type 100, 300s & 47ft)	Multi Task Lifeboats and Utility Craft	1061	21.20%
FRC	Fast Rescue Craft	928	18.54%
100	Small Multi Task Utility Craft	734	14.67%
ACV	Air Cushion Vehicle (Hovercraft)	301	6.01%
400	Small Multi-Task Cutter	297	5.93%
DFO - C&P	Inshore and Offshore Fishery Patrol Vessels.	148	2.96%
1100	Major Navais Tender / Light Icebreaker	105	2.10%
DFO - SCIENCE	Survey and Research Vessels	71	1.42%
500	Intermediate Multi Task Cutter	44	0.88%
600	Offshore Ice Strengthened Mulit Task Cutter	42	0.84%
1000	Ice Strengthened Medium Navais Tender	40	0.80%
800	Small Navais Tender	36	0.72%
1200	Medium Gulf / River Icebreaker	30	0.60%
1050	Medium Navais Tender / Light Icebreaker	21	0.42%
200	Small Multi Task Ice Strengthened Cutter	15	0.30%
700	Special River Navais Tender	4	0.08%
1300	Heavy Gulf Icebreaker	2	0.04%

For further information on the Canadian Coast Guard Fleet, please visit our web site at:
http://www.ccg-gcc.gc.ca/vessels-navires/main_e.asp

SAR REGIONS, JRCCS/MRSCS AND REGIONAL SAR AREAS

Within international agreements for maritime SAR, Canada has three SAR Regions (SRRs): Halifax SRR, Trenton SRR, and Victoria SRR, the total area of which extends from the Canada/US border to the North Pole and from approximately 800 nautical miles in the Pacific Ocean to 1000 nautical miles in the Atlantic Ocean.

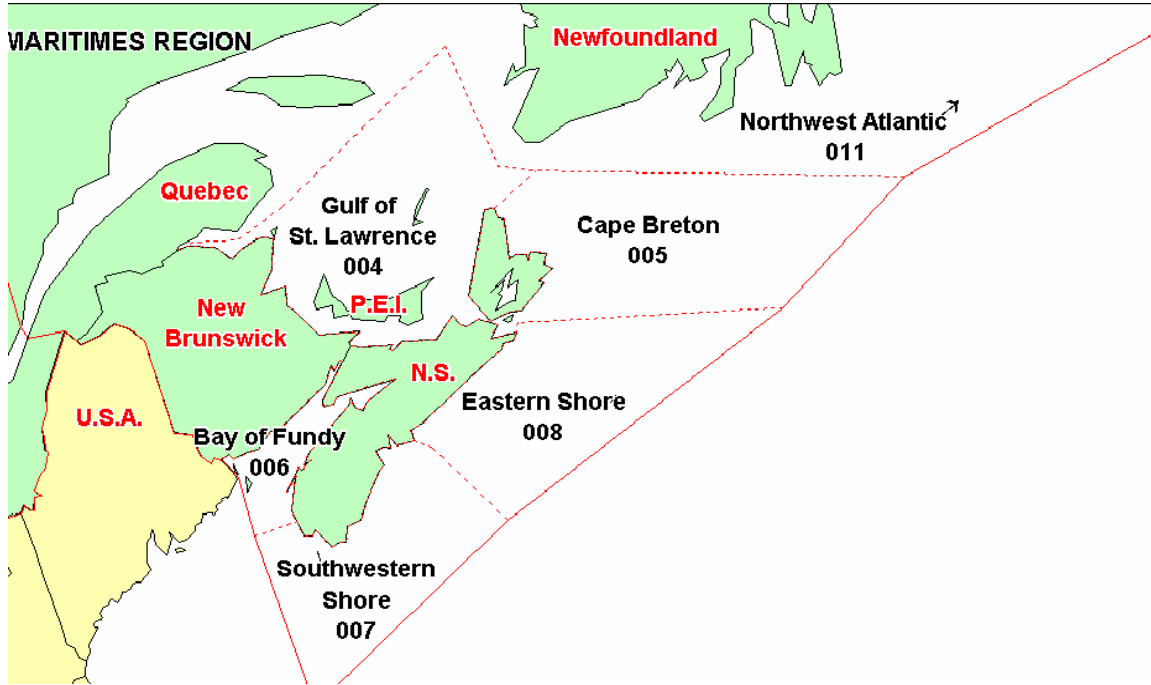


The Canadian Coast Guard jointly staffs three Joint Rescue Co-ordination Centres (JRCCs) with the Canadian Forces. The JRCCs are located in Victoria, British Columbia; Trenton, Ontario; and Halifax, Nova Scotia. Each JRCC is responsible for the planning, co-ordination, conduct and control of aeronautical and maritime SAR operations within their SRR. Two Maritime Rescue Sub-centres (MRSCs) in Québec City, Québec and St. John's, Newfoundland assist the JRCCs workload in areas of high marine activity.

REGIONAL SAR AREAS

CHART -15 EAST COAST / ATLANTIC

MARITIME REGION



NEWFOUNDLAND REGION

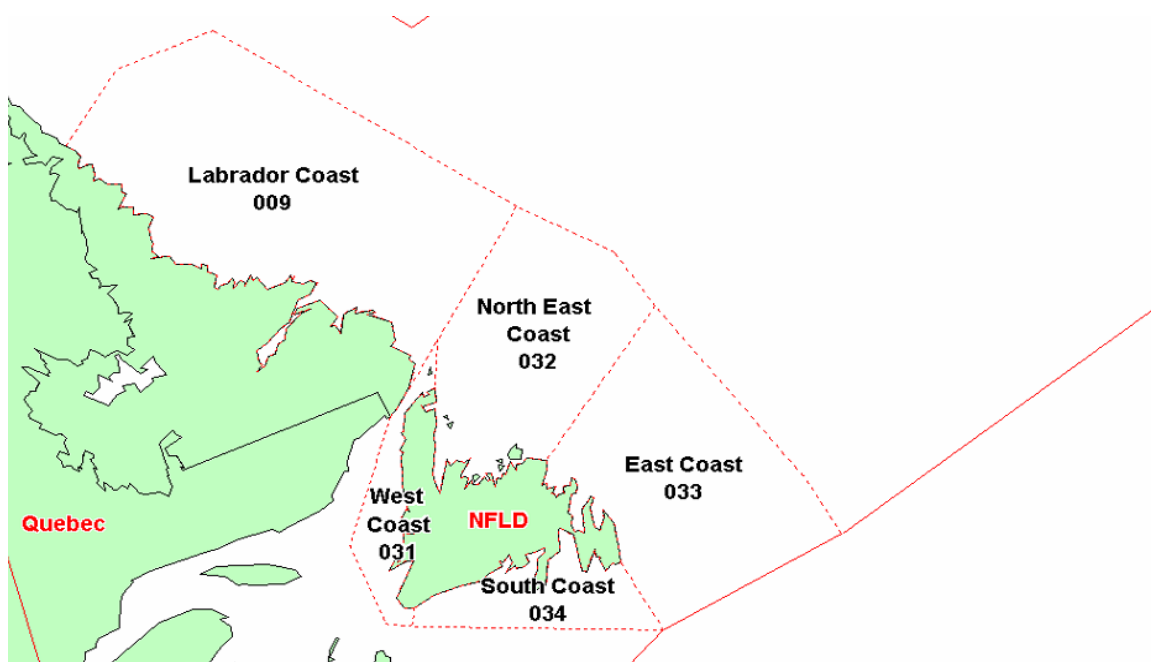


CHART - 15A QUEBEC / GULF OF THE ST LAWRENCE

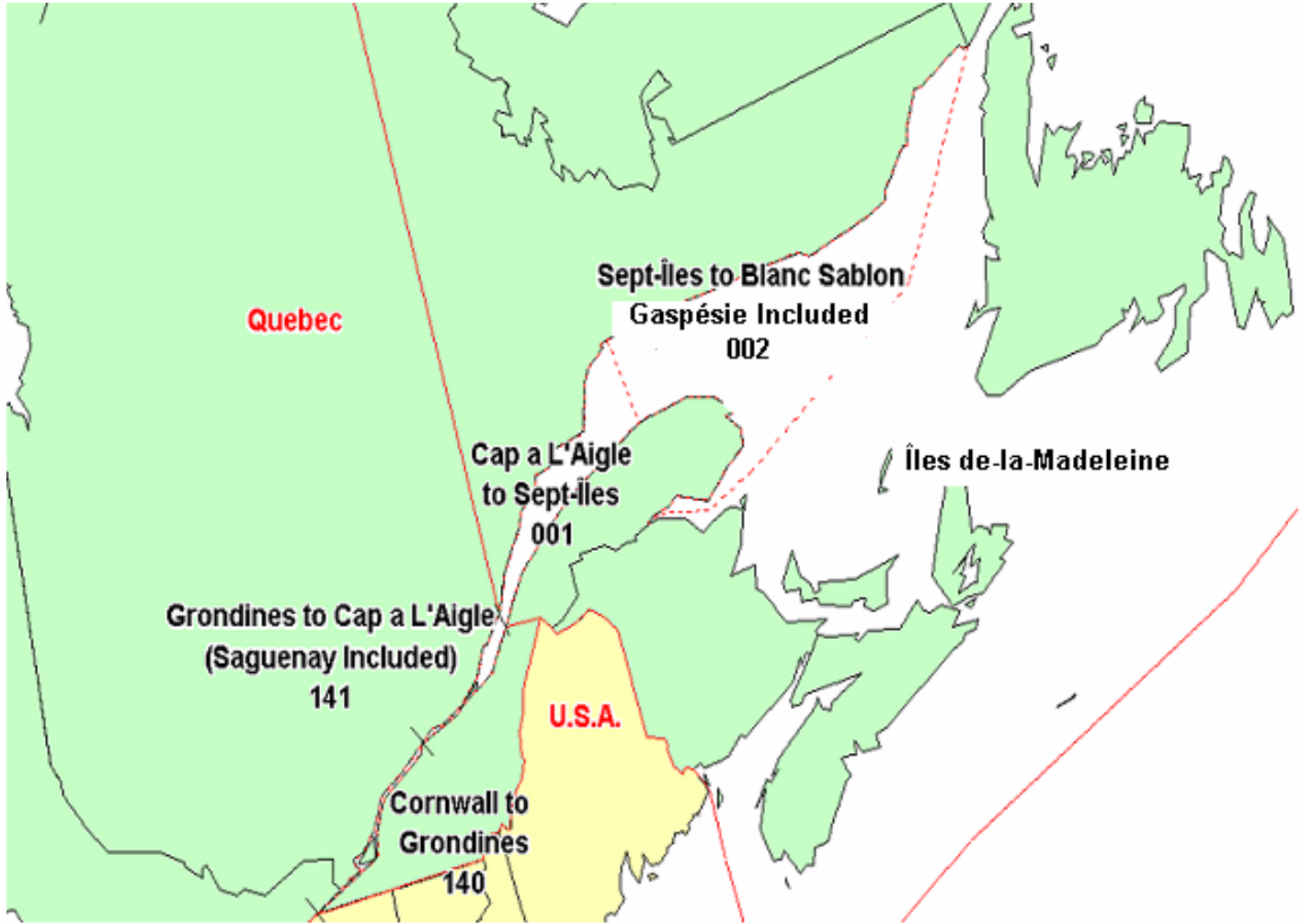


CHART - 15B CENTRAL CANADA, ARCTIC & GREAT LAKES AREAS

ARCTIC REGION

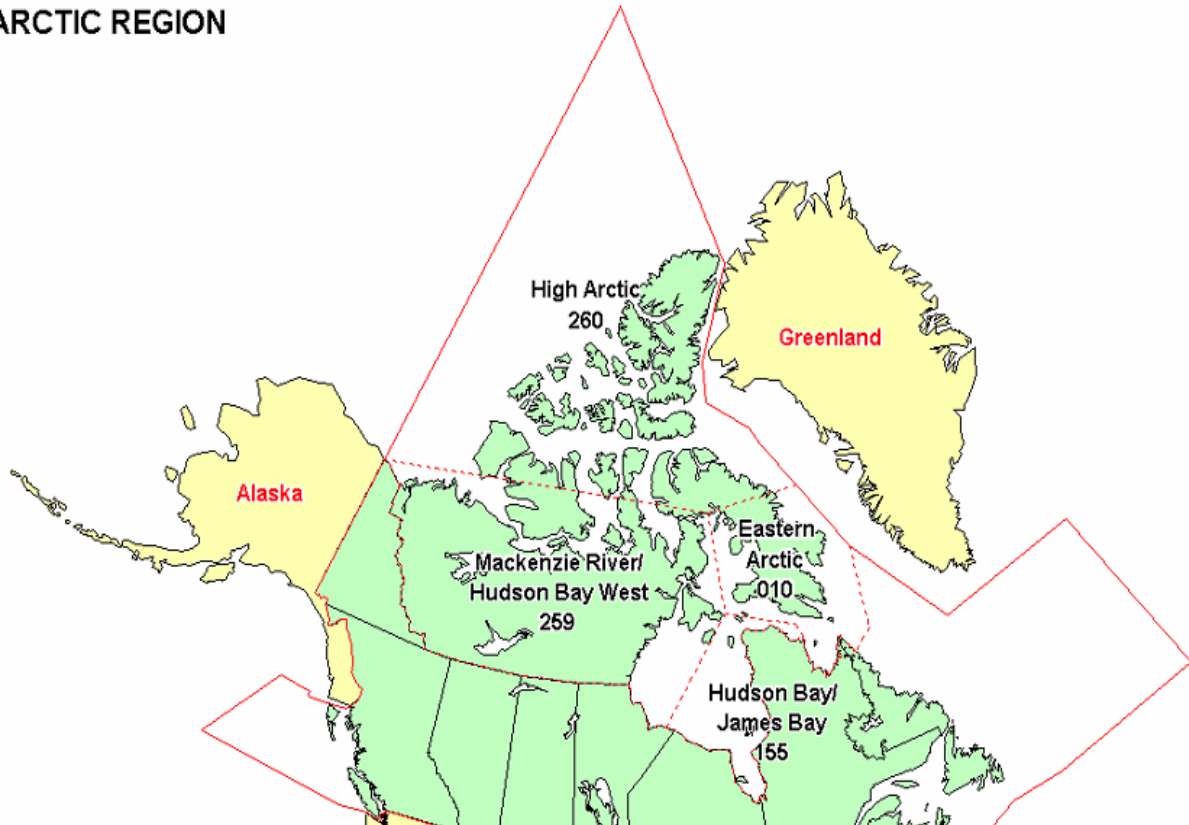
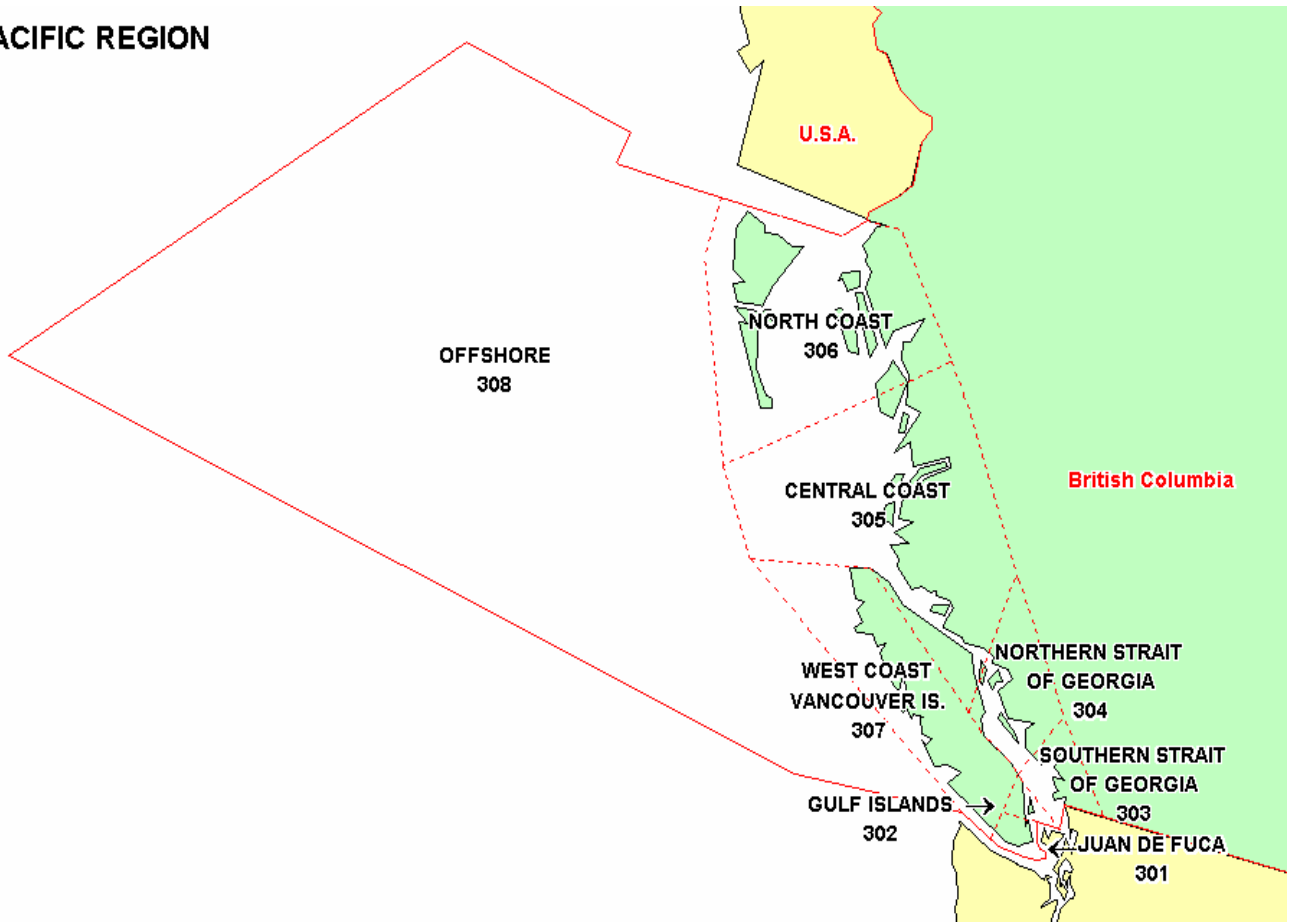


CHART 15C - WEST COAST / PACIFIC

PACIFIC REGION



**TABLE 6 - NUMBER OF MARITIME SAR INCIDENTS BY SAR AREA
(M1, M2, M3, M4)**

Region	Rank	SAR Area	SAR Area Descriptive Name	Number of Incidents per SAR Area
Maritime	1	004	Gulf of St. Lawrence (East of Anticosti Is.)	511
	2	007	Southwestern Shore (N.S.)	409
	3	006	Bay of Fundy (N.S.)	153
	4	008	Eastern Shore (N.S.)	88
	5	005	Cape Breton (N.S.) (North East Coast)	77
	6	011	Northwest Atlantic	27
				1265
Newfoundland	1	033	East Coast (Nfld.)	145
	2	032	North East Coast (Nfld.)	128
	3	034	Outside Canadian Waters	125
	4	031	West Coast (Nfld.)	36
	5	009	Labrador Coast	24
				457
Québec	1	140	Cornwall to Grondines	875
	2	141	Grondines to Cap à L'Aigle (Saguenay River included)	135
	3	001	Cap à L'Aigle to Sept Îles	73
	4	002	Sept-Îles to Blanc Sablon (Gaspésie & Île de la Madeleine included)	50
				1133

Region	Rank	SAR Area	SAR Area Descriptive Name	Number of Incidents per SAR Area
Central & Arctic	1	105	Lake St. Claire/Detroit River	217
	2	107	Eastern Lake Erie	200
	3	108	Western Lake Ontario	191
	4	103	Georgian Bay	124
	5	109	Eastern Lake Ontario	116
	6	110	Gananoque to Cornwall (Ont.)	76
	7	104	Lake Huron	58
	8	106	Western Lake Erie	55
	9	200	Lake Winnipeg	* 50
	10	102	North Channel St. Mary's River	40
	11	100	Western Lake Superior	28
	12	101	Eastern Lake Superior	10
	13	155	Hudson Bay/James Bay	9
	14	260	High Arctic	7
* Note: SAR AREA 200 - Lake Winnipeg – (H) Incidents Only				1181

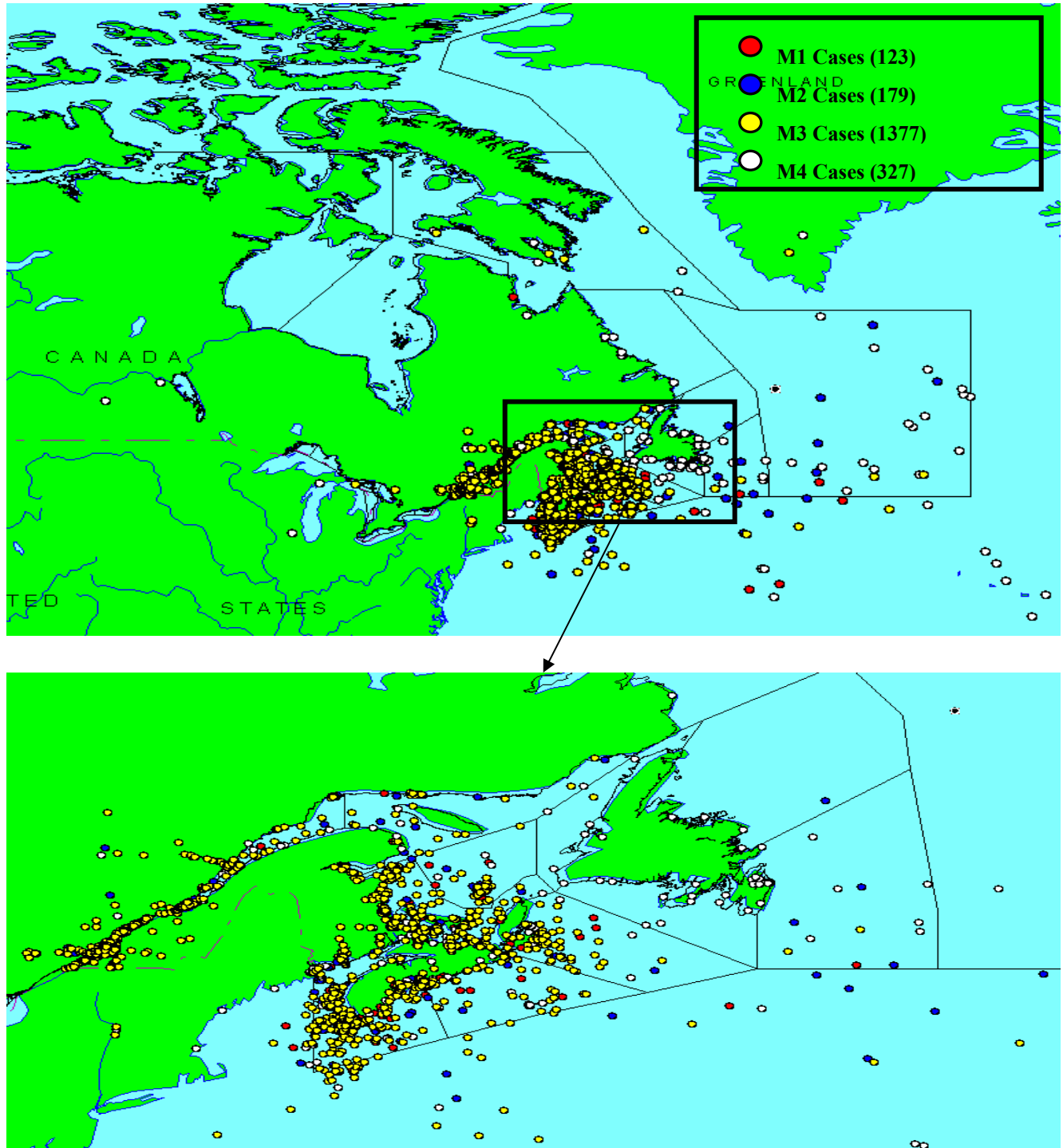
Pacific	1	303	Southern Strait of Georgia (B.C.)	576
	2	304	Northern Strait of Georgia (B.C.)	405
	3	302	Gulf Islands (B.C.)	266
	4	301	Juan de Fuca Strait (B.C.)	253
	5	305	Central Coast (B.C.)	246
	6	306	North Coast (B.C.)	219
	7	307	West Coast Vancouver Island	186
	8	308	Pacific Offshore	20
				2171

Note: Though Canada's Joint Rescue Co-ordination Centers (JRCCs) and Maritime Rescue Sub-centres (MRSCs) provided assistance to waters external to Canadian International boundaries, the data provided above only include those waters which are within the Canadian Coast Guard's area of responsibility

SAR REGIONS (SRR)

CHART 16 - HALIFAX SRR

*Including JRCC Halifax, MRSC Québec and MRSC St. John's



HALIFAX SRR

JRCC Halifax, MRSC Québec and MRSC St. John's

The objective of the SAR System is to save 100% of Lives at Risk in Distress and Potential Distress Incidents. Of the 2006 maritimes incidents incidents that occurred in the Halifax SRR, 97.66% of the Lives at Risk were saved in 2001.

Maritime Incidents (M1 +M2 +M3 +M4) – 2006

- M1 – Distress Incidents – **123** representing **6.13 %** of maritime incidents.
- M2 – Potential Distress Incidents – **179** representing **8.92 %** of maritime incidents.
- M3 – Incidents resolved in the Uncertainty Phase – **1377** representing **68.64 %** of maritime incidents.
- M4 – False Alarms and Hoaxes – **327** representing **16.30 %** of maritime incidents

People Assisted

Lives at Risk

- Lives Saved – **1004**
- Lives Lost – **24**

Total People assisted, including general calls for assistance – **6638**

Other Incidents (A + H + U) = 386

- Distress Incidents – **57** representing **14.77%** of other incidents.
- Potential Distress Incidents – **43** representing **10.88%** of other incidents.
- Incidents resolved in the Uncertainty Phase – **112** representing **29.02%** of other incidents
- False Alarms and Hoaxes – **175** representing **45.34%** of other incidents.

People Assisted

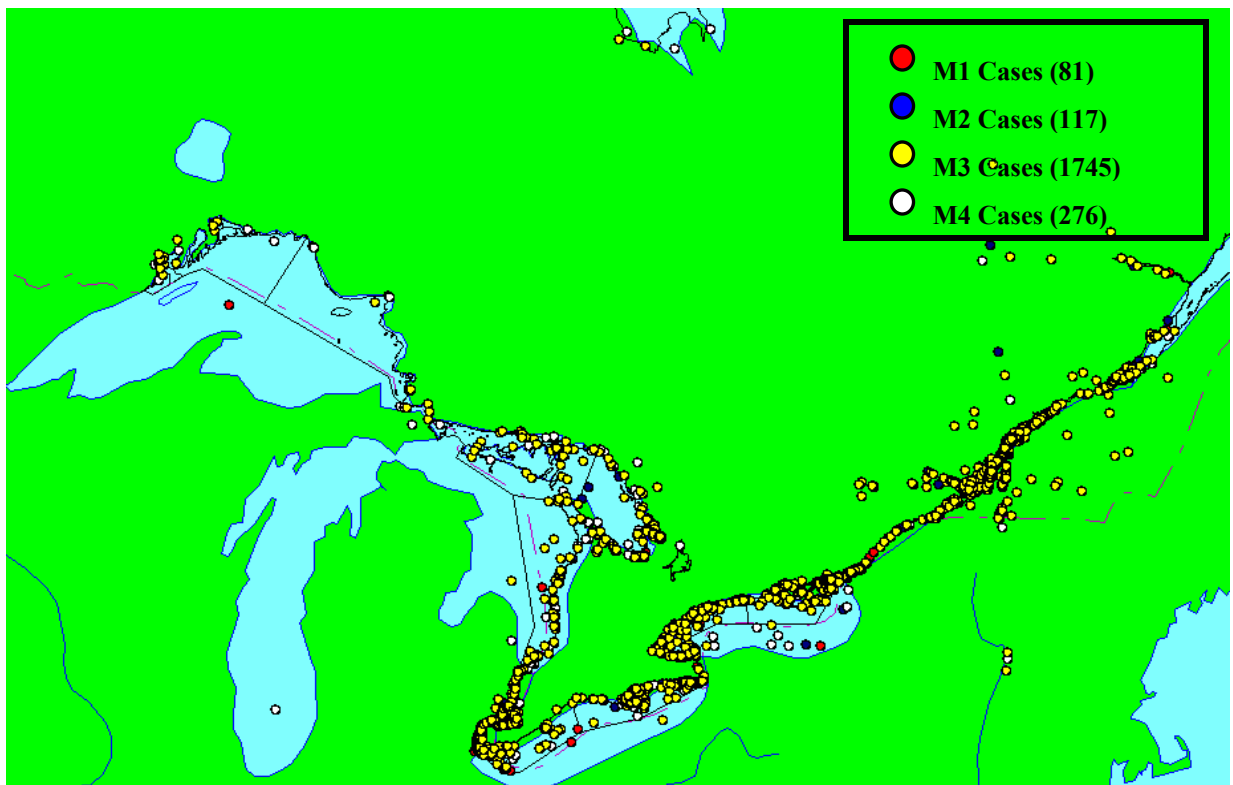
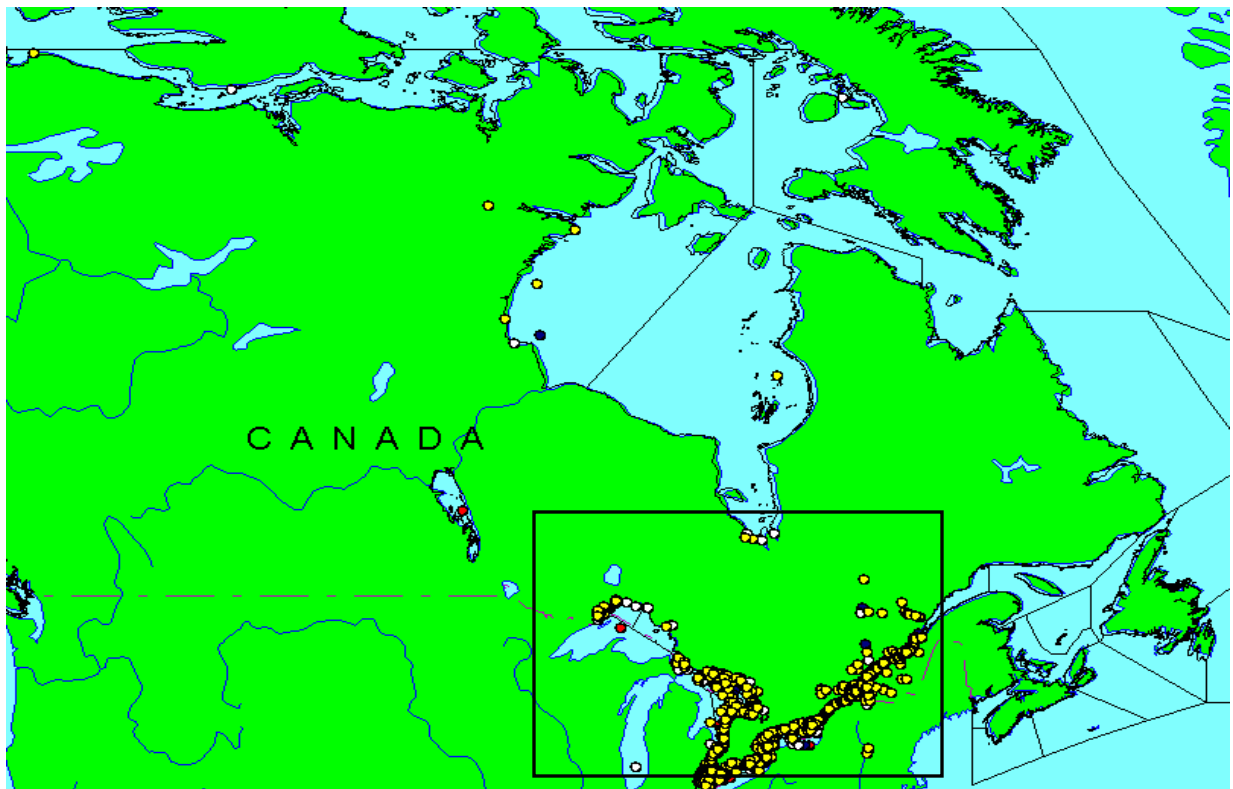
Lives at Risk

- Lives Saved – **392**
- Lives Lost – **30**

Total People assisted, including general calls for assistance – **2376**

CHART 16A - TRENTON SRR

*Including JRCC Trenton and MRSC Québec



TRENTON SRR

JRCC Trenton and MRSC Québec

The objective of the SAR System is to save 100% of Lives at Risk in Distress and Potential Distress Incidents. Of the 2219 maritime incidents that occurred in the Trenton SRR, 94.58% of the Lives at Risk were saved in 2001.

Maritime Incidents (M1 +M2 +M3 +M4) – 2219

- M1 – Distress Incidents – **81** representing **3.65%** of maritime incidents.
- M2 – Potential Distress Incidents – **117** representing **5.27%** of maritime incidents.
- M3 – Incidents resolved in the Uncertainty Phase – **1745** representing **78.64%** of maritime incidents.
- M4 – False Alarms and Hoaxes – **276** representing **12.44%** of maritime incidents

People Assisted

Lives at Risk

- Lives Saved – **507**
- Lives Lost – **29**

Total People assisted, including general calls for assistance – **5923**

Other Incidents (A + H + U) = 676

- Distress Incidents – **169** representing **25%** of other incidents.
- Potential Distress Incidents – **49** representing **7.25%** of other incidents.
- Incidents Resolved in the Uncertainty Phase – **85** representing **12.57%** of other incidents
- False Alarms and Hoaxes – **373** representing **55.18%** of other incidents.

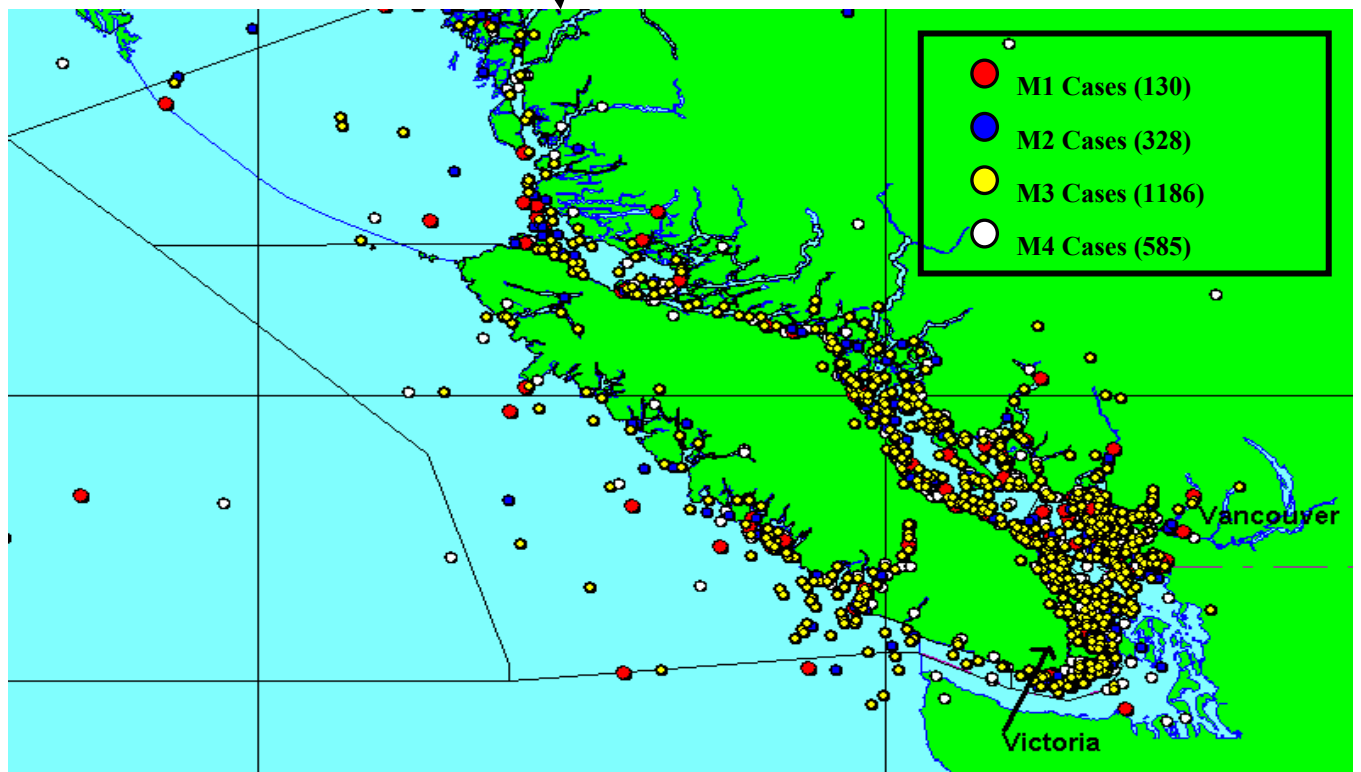
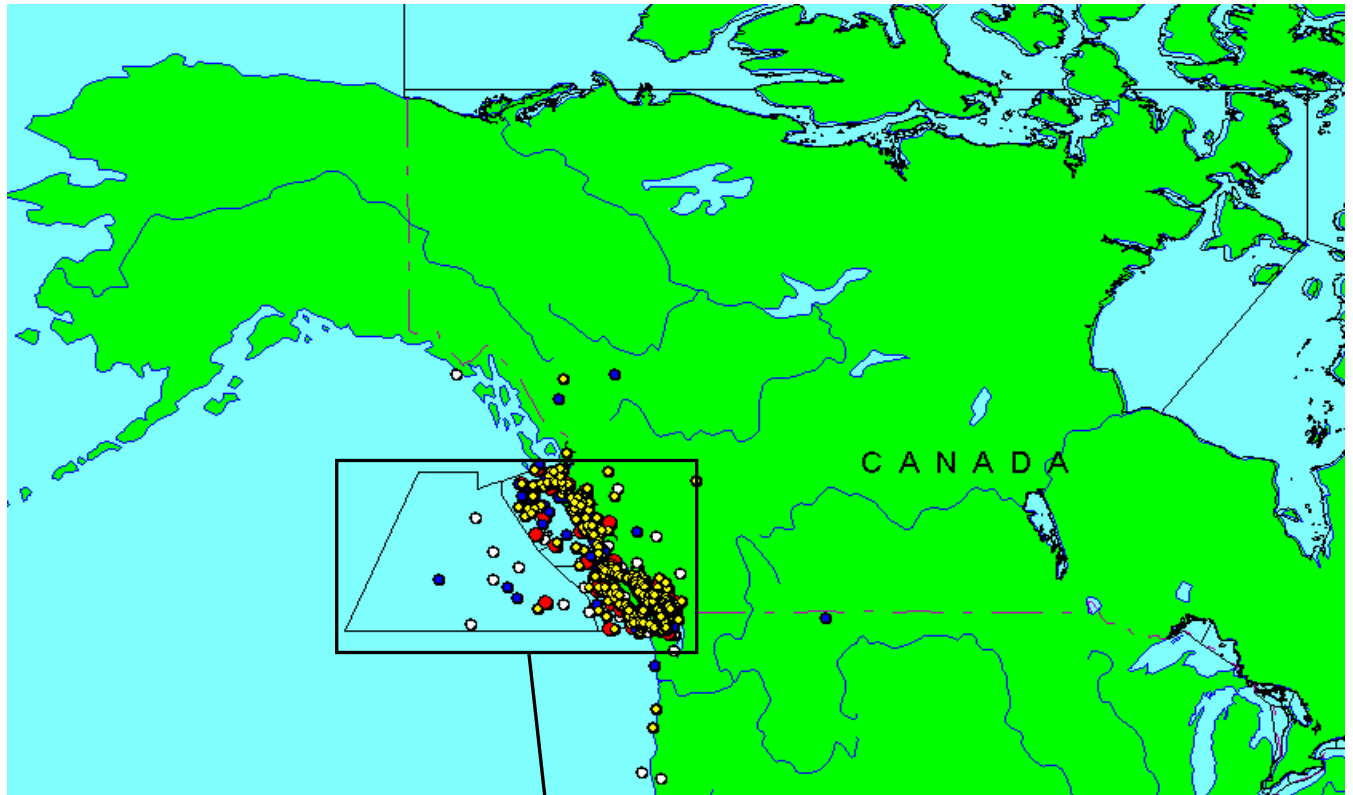
People Assisted

Lives at Risk

- Lives Saved – **292**
- Lives Lost – **72**

Total People assisted, including general calls for assistance – 610

CHART 16B - VICTORIA SRR



VICTORIA SRR

JRCC Victoria

The objective of the SAR System is to save 100% of Lives at Risk in Distress and Potential Distress Incidents. Of the 2229 maritime incidents that occurred in the Victoria SRR, 98.29% of the Lives at Risk were saved in 2001.

Maritime Incidents (M1 +M2 +M3 +M4) – 2229

- M1 – Distress Incidents – **130** representing **5.83%** of maritime incidents.
- M2 – Potential Distress Incidents – **328** representing **14.72%** of maritime incidents.
- M3 – Incidents resolved in the Uncertainty Phase – **1186** representing **53.21%** of maritime incidents.
- M4 – False Alarms and Hoaxes – **585** representing **26.24%** of maritime incidents

People Assisted

Lives at Risk

- Lives Saved – **1152**
- Lives Lost – **20**

Total People assisted, including general calls for assistance – **18,225 (see note below)**

Note: 2001 figure (14,303) includes two M4 incidents involving Military Aircraft Carriers with 6275 persons onboard for each incident. Excluding both of these incidents, the total for M4 People Assisted for JRCC Victoria in 2001 would be 5074.

Other Incidents (A + H + U) = 738

- Distress Incidents – **99** representing **13.77%** of other incidents.
- Potential Distress Incidents – **138** representing **19.19%** of other incidents.
- Incidents resolved in the Uncertainty Phase – **107** representing **14.88%** of other incidents
- False Alarms and Hoaxes – **375** representing **52.16%** of other incidents.

People Assisted

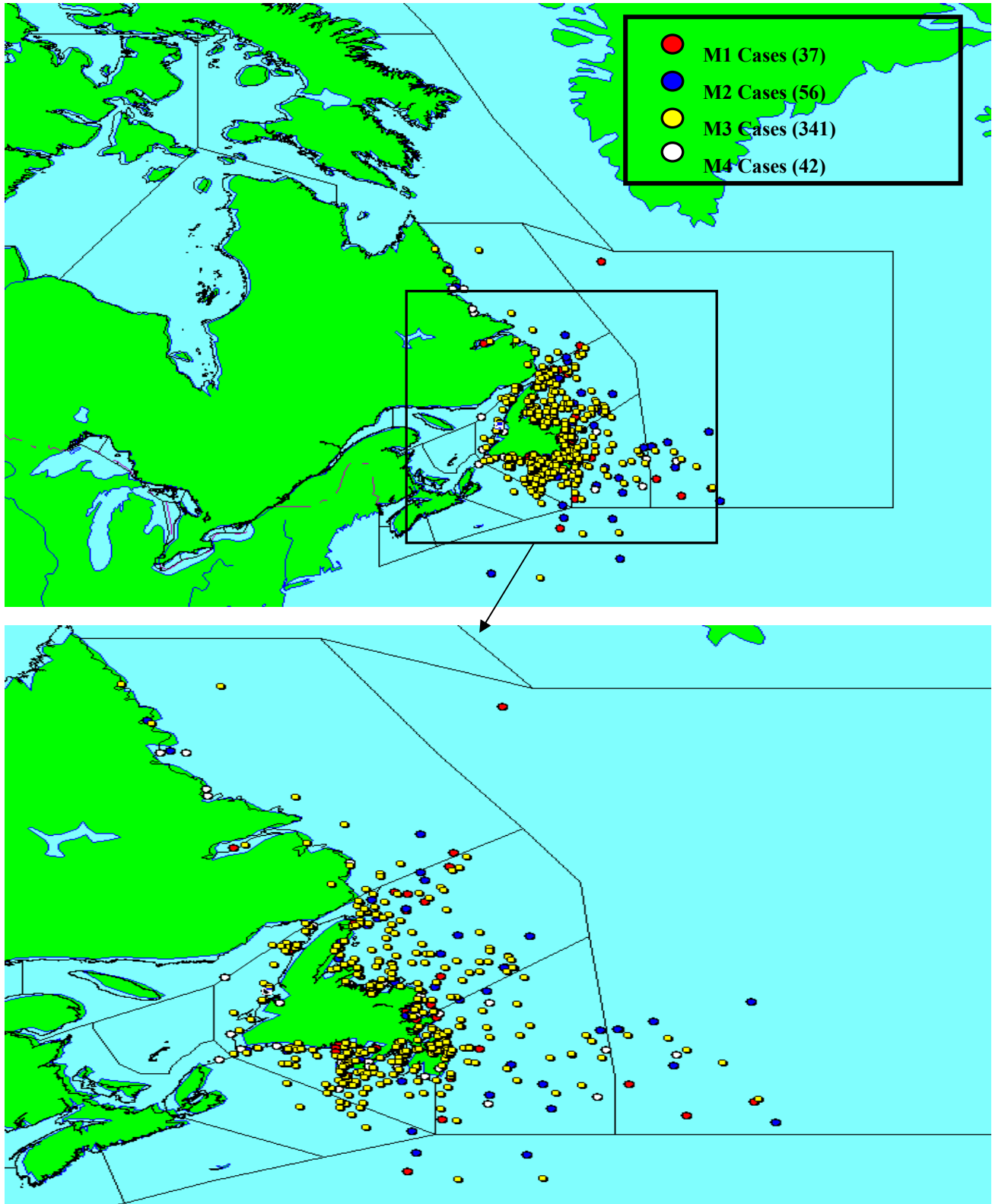
Lives at Risk

- Lives Saved – **391**
- Lives Lost – **47**

Total People assisted, including general calls for assistance – **1072**

NEWFOUNDLAND REGION

CHART 17 - MRSC ST. JOHN'S



MRSC ST. JOHNS

Maritime Incidents (M1 +M2 +M3 +M4) – 476

- M1 – Distress Incidents – **37** representing **7.77 %** of maritime incidents.
- M2 – Potential Distress Incidents – **56** representing **11.76 %** of maritime incidents.
- M3 – Incidents resolved in the Uncertainty Phase – **341** representing **71.64 %** of maritime incidents.
- M4 – False Alarms and Hoaxes – **42** representing **8.83 %** of maritime incidents

People Assisted

Lives at Risk

- Lives Saved – **274**
- Lives Lost – **10**

Total People assisted, including general calls for assistance – **2144**

Other Incidents (A + H + U) = 31

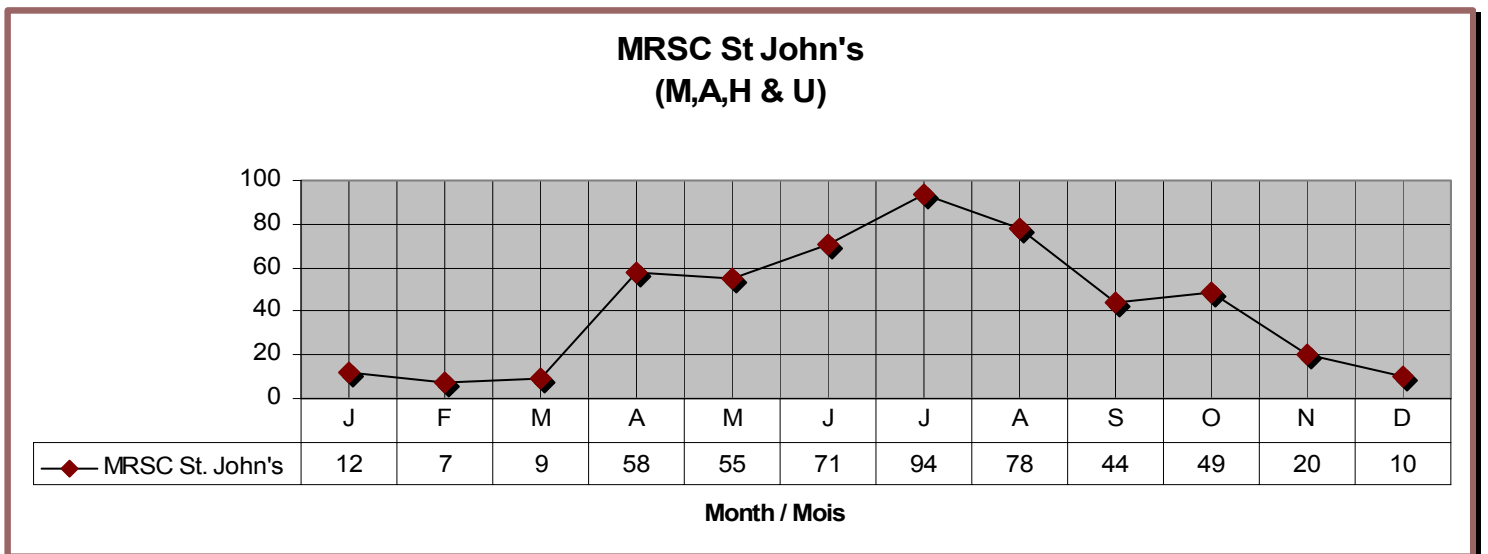
- Distress Incidents – **1** representing **29.04 %** of other incidents.
- Potential Distress Incidents – **3** representing **9.68 %** of other incidents.
- Incidents resolved in the Uncertainty Phase – **4** representing **12.90 %** of other incidents
- False Alarms and Hoaxes – **15** representing **48.38 %** of other incidents.

People Assisted

Lives at Risk

- Lives Saved – **11**
- Lives Lost – **8**

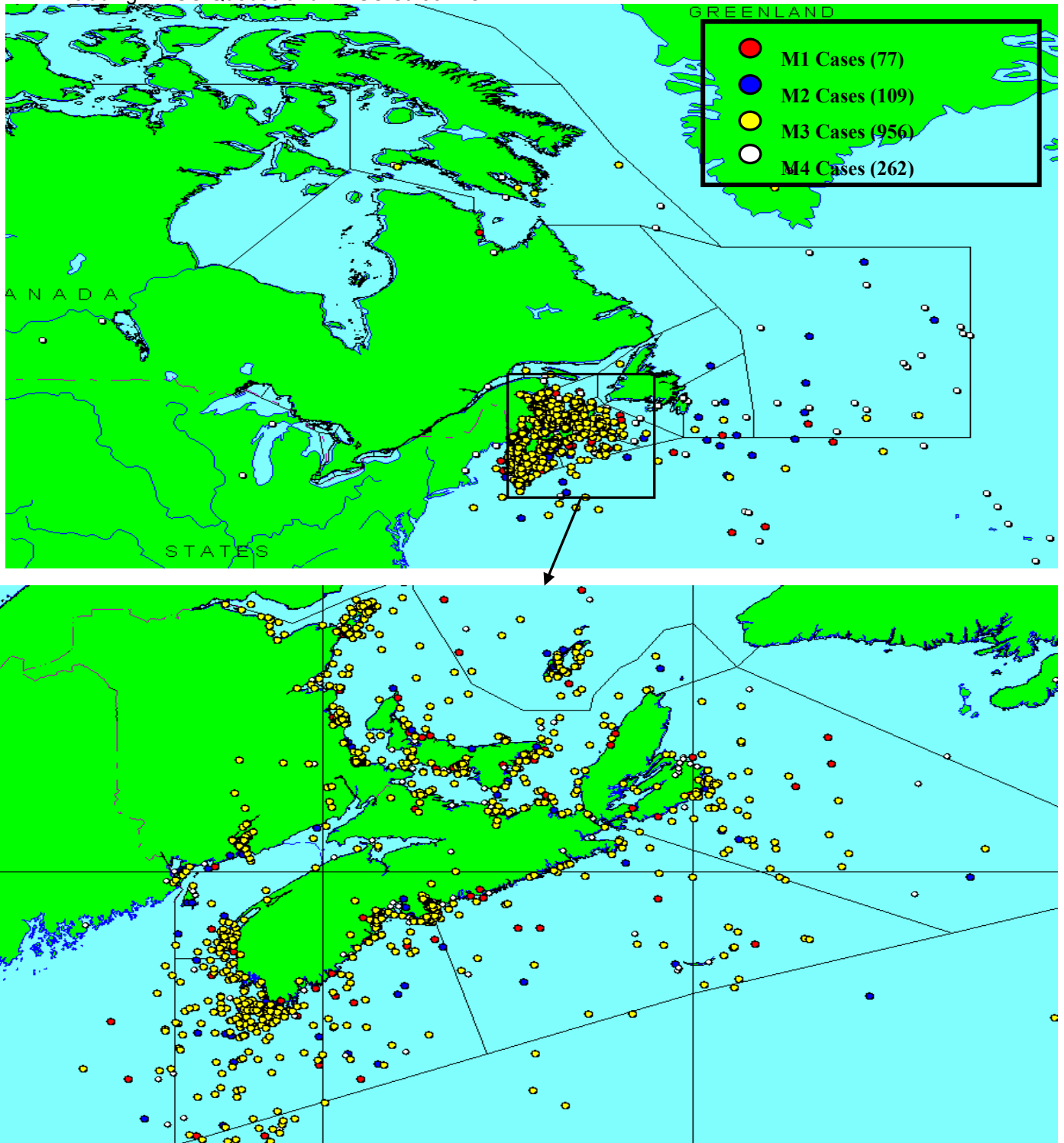
Total People assisted, including general calls for assistance – **20**



MARITIME REGION

CHART 17A - JRCC HALIFAX

*Excluding MRSC Québec and MRSC St. John's



JRCC HALIFAX

*Excluding MRSC Québec and MRSC St. John's

Maritime Incidents (M1 +M2 +M3 +M4) – 1404

- M1 – Distress Incidents – **77** representing **5.48 %** of maritime incidents.
- M2 – Potential Distress Incidents – **109** representing **7.76%** of maritime incidents.
- M3 – Incidents resolved in the Uncertainty Phase – **956** representing **68.09%** of maritime incidents.
- M4 – False Alarms and Hoaxes – **262** representing **18.66%** of maritime incidents

People Assisted

Lives at Risk

- Lives Saved – **664**
- Lives Lost – **12**

Total People assisted, including general calls for assistance – **4175**

Other Incidents (A + H + U) = 341

- Distress Incidents – **45** representing **13.20%** of other incidents.
- Potential Distress Incidents – **36** representing **10.56%** of other incidents.
- Incidents resolved in the Uncertainty Phase – **106** representing **31.09%** of other incidents
- False Alarms and Hoaxes – **154** representing **45.16%** of other incidents.

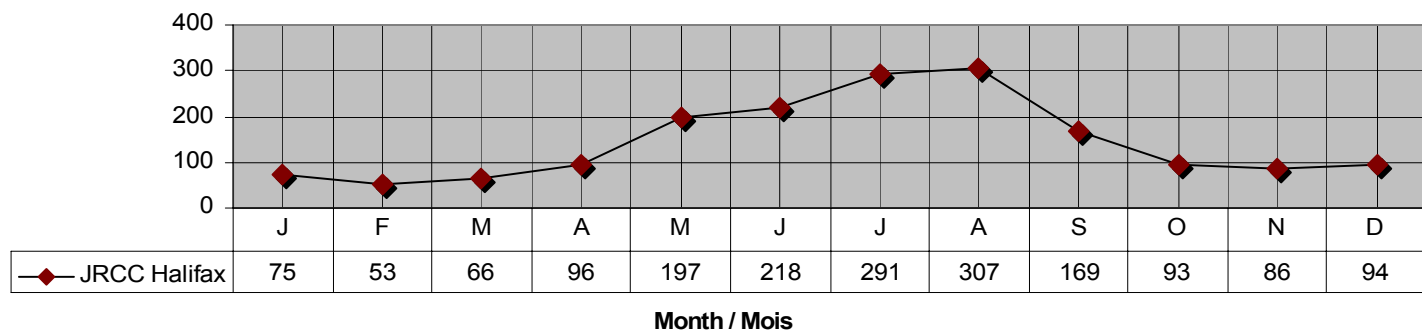
People Assisted

Lives at Risk

- Lives Saved – **373**
- Lives Lost – **20**

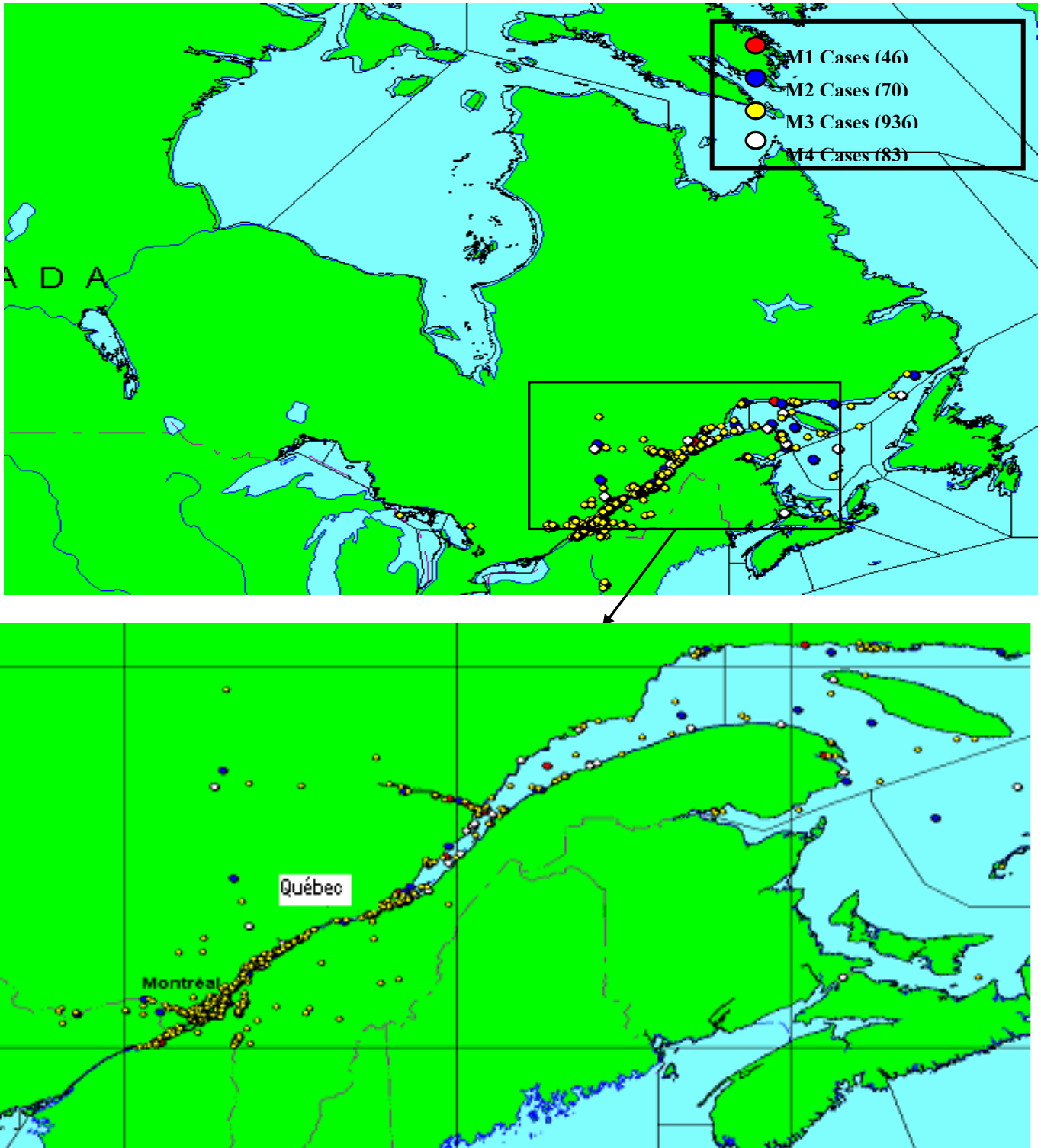
Total People assisted, including general calls for assistance – **2345**

**JRCC Halifax
(M,A,H & U)**



QUÉBEC REGION

CHART 17B - MRSC QUÉBEC



MRSC QUÉBEC

Maritime Incidents (M1 +M2 +M3 +M4) –1135

- M1 – Distress Incidents – **46** representing **4.02 %** of maritime incidents.
- M2 – Potential Distress Incidents – **70** representing **6.17 %** of maritime incidents.
- M3 – Incidents resolved in the Uncertainty Phase – **936** representing **82.47 %** of maritime incidents.
- M4 – False Alarms and Hoaxes – **83** representing **7.34 %** of maritime incidents

People Assisted

Lives at Risk

- Lives Saved – **281**
- Lives Lost – **10**

Total People assisted, including general calls for assistance – **3061**

Other Incidents (A + H + U) = 101

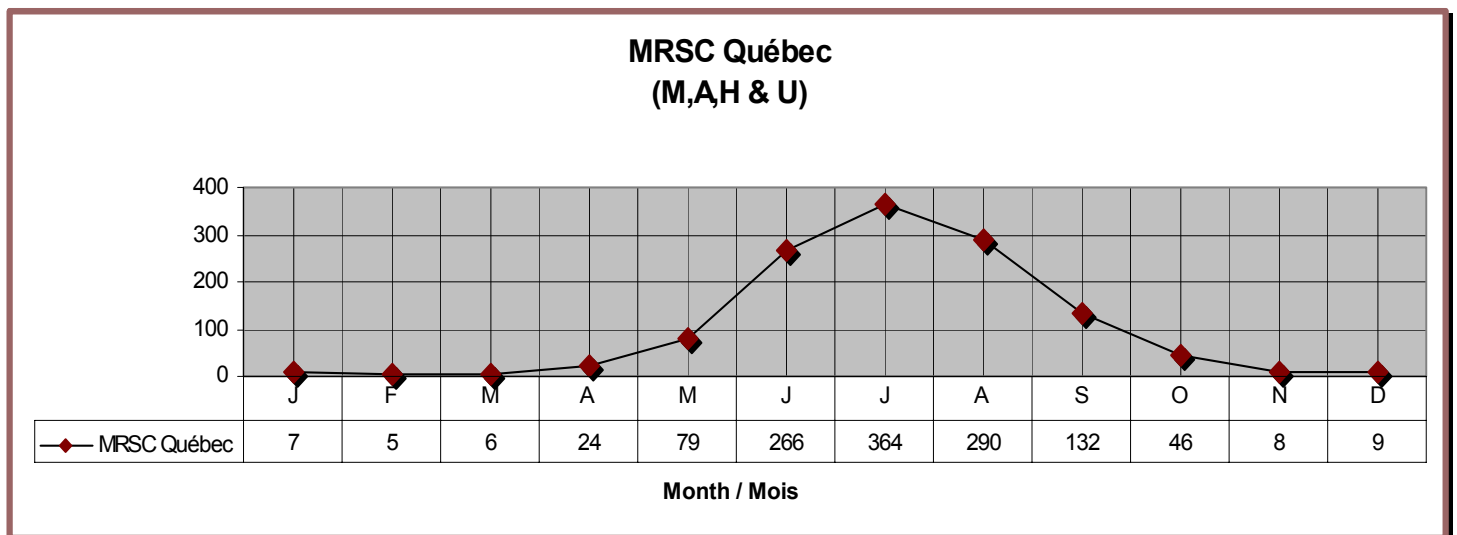
- Distress Incidents – **32** representing **31.68%** of other incidents.
- Potential Distress Incidents – 34 representing **18.81 %** of other incidents.
- Incidents resolved in the Uncertainty Phase – **21** representing **20.79%** of other incidents
- False Alarms and Hoaxes – **27** representing **28.72%** of other incidents.

People Assisted

Lives at Risk

- Lives Saved – **41**
- Lives Lost – 21

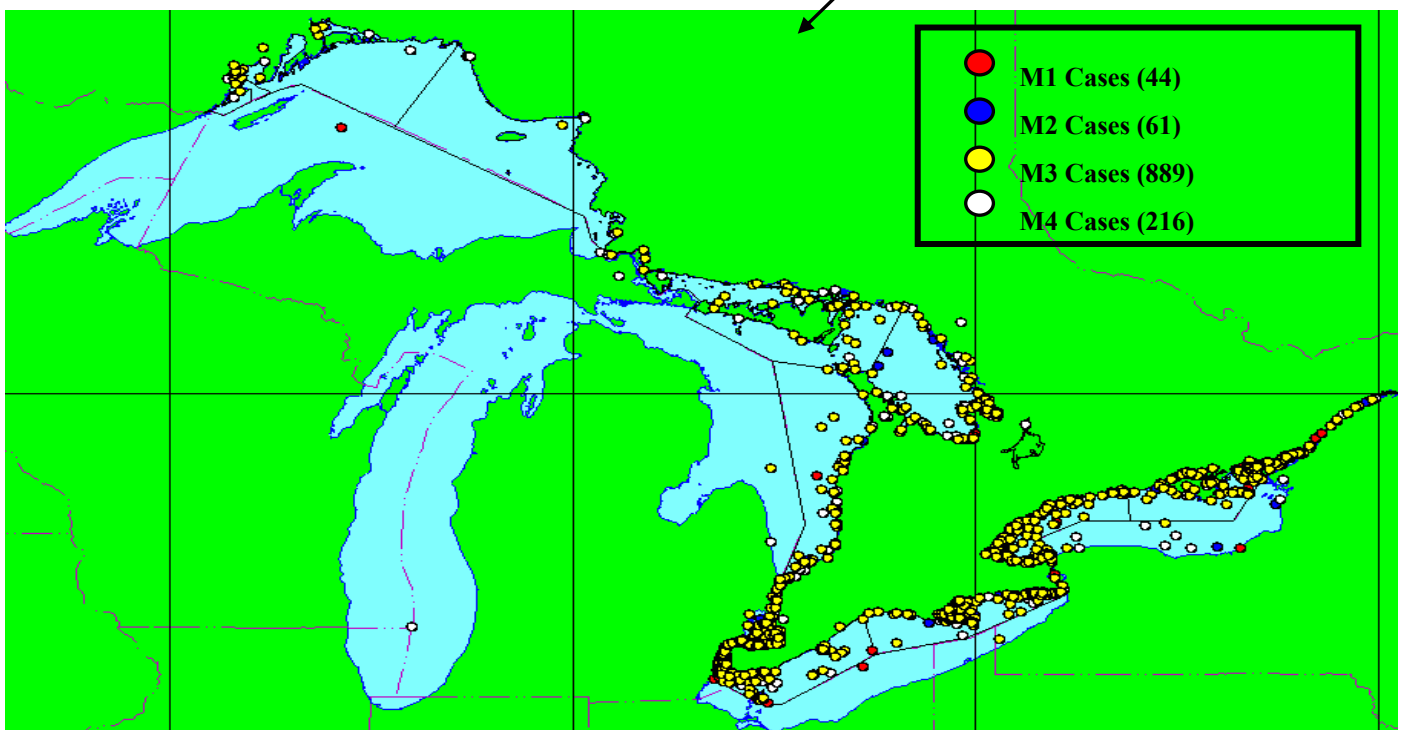
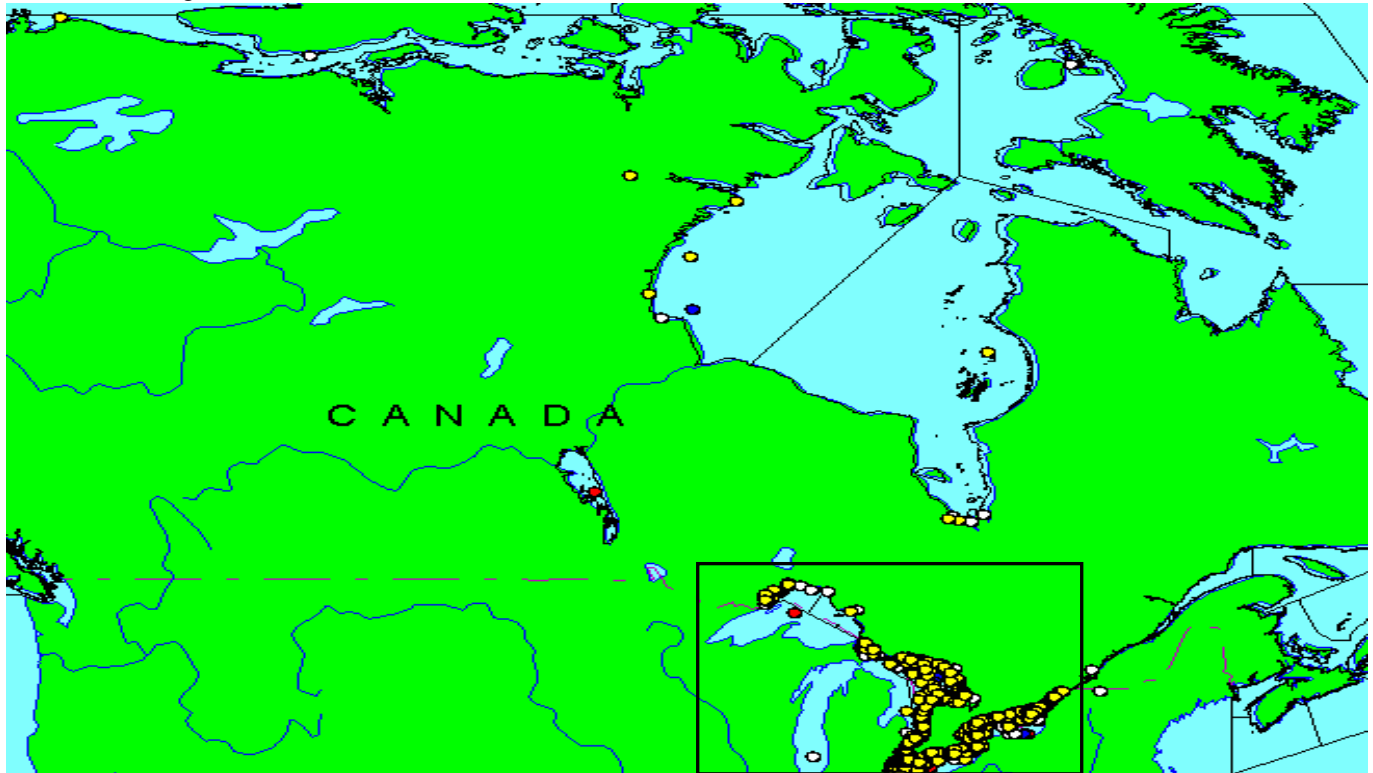
Total People assisted, including general calls for assistance – **71**



CENTRAL & ARCTIC REGION

CHART 17C – JRCC TRENTON

* Excluding MRSC Québec



CENTRAL & ARCTIC REGION - JRCC TRENTON

*Excluding MRSC Québec

Maritime Incidents (M1 +M2 +M3 +M4) – 1210

- M1 – Distress Incidents – **44** representing **3.65%** of maritime incidents.
- M2 – Potential Distress Incidents – 61 representing **5.27%** of maritime incidents.
- M3 – Incidents resolved in the Uncertainty Phase – **889** representing **78.64%** of maritime incidents.
- M4 – False Alarms and Hoaxes – **216** representing **12.44%** of maritime incidents

People Assisted

Lives at Risk

- Lives Saved – **292**
- Lives Lost – **21**

Total People assisted, including general calls for assistance – **3181**

Other Incidents (A + H + U) = 589

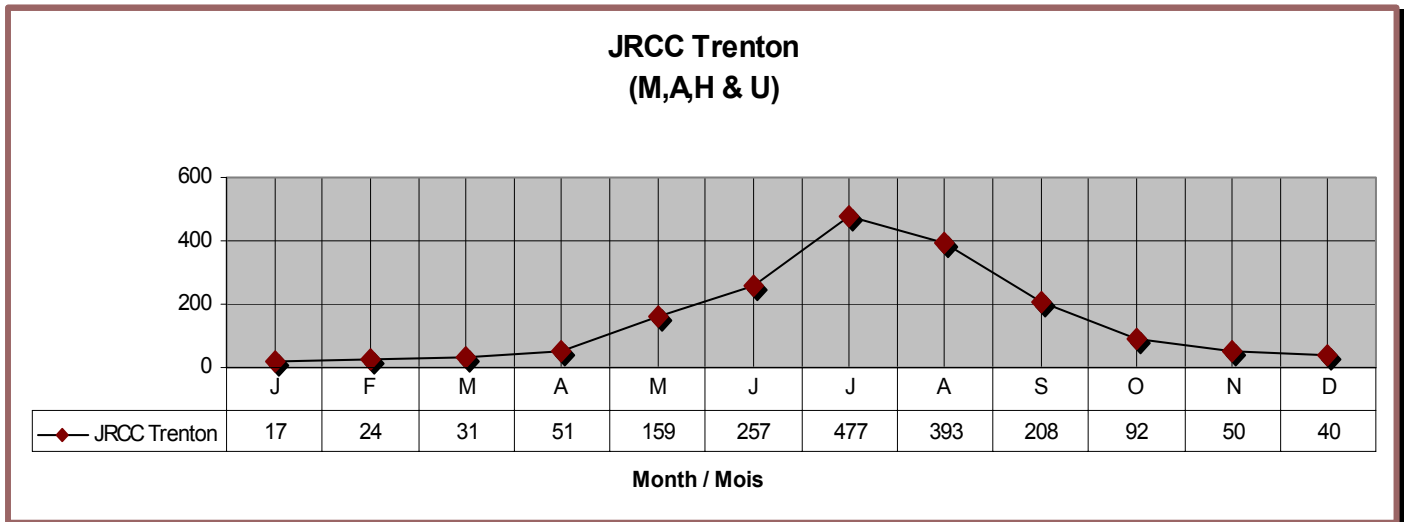
- Distress Incidents – **140** representing **23.77 %** of other incidents.
- Potential Distress Incidents – **33** representing **5.61 %** of other incidents.
- Incidents resolved in the Uncertainty Phase –66 representing **11.21 %** of other incidents
- False Alarms and Hoaxes – **350** representing **59.43 %** of other incidents.

People Assisted

Lives at Risk

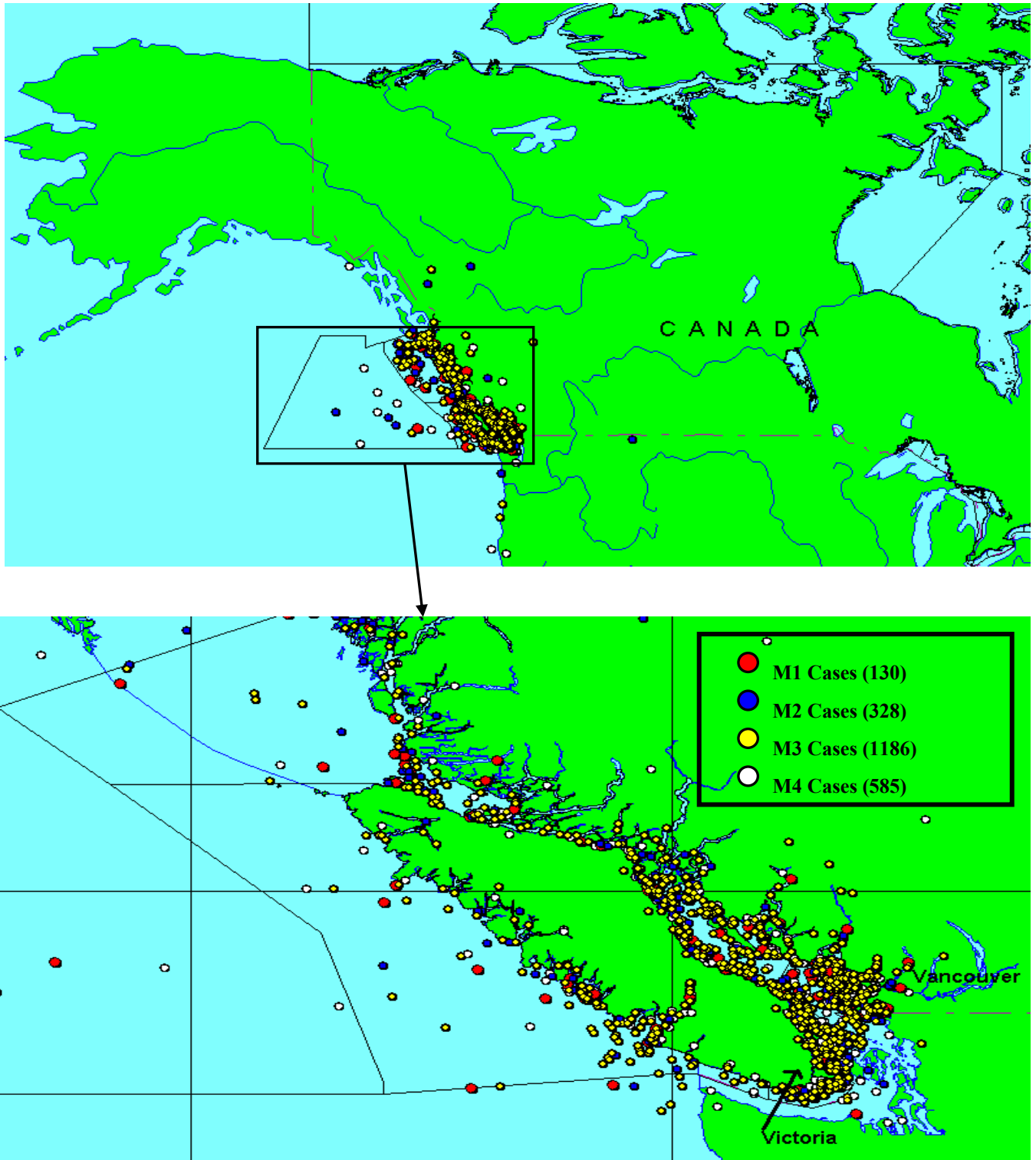
- Lives Saved – **259**
- Lives Lost – **53**

Total People assisted, including general calls for assistance – 550



PACIFIC REGION

CHART 17D – JRCC VICTORIA



JRCC VICTORIA

Maritime Incidents (M1 +M2 +M3 +M4) – 2229

- M1 – Distress Incidents – **130** representing **5.83%** of maritime incidents.
- M2 – Potential Distress Incidents – **328** representing **14.72%** of maritime incidents.
- M3 – Incidents resolved in the Uncertainty Phase – **1186** representing **53.21%** of maritime incidents.
- M4 – False Alarms and Hoaxes – **585** representing **26.24%** of maritime incidents

People Assisted

Lives at Risk

- Lives Saved – **1152**
- Lives Lost – **20**

Total People assisted, including general calls for assistance – **18,225 (see note below)**

Note: 2001 figure (14,303) includes two M4 incidents involving Military Aircraft Carriers with approximately 6275 persons onboard for each incident. Excluding both of these incidents, the total for M4 People Assisted for JRCC Victoria in 2001 would be 5074.

Other Incidents (A + H + U) = 738

- Distress Incidents – **99** representing **13.77%** of other incidents.
- Potential Distress Incidents – **138** representing **19.19%** of other incidents.
- Incidents resolved in the Uncertainty Phase – **107** representing **14.88%** of other incidents
- False Alarms and Hoaxes – **375** representing **52.16%** of other incidents.

People Assisted

Lives at Risk

- Lives Saved – **391**
- Lives Lost – **47**

Total People assisted, including general calls for assistance – **1072**

Note: This data was previously presented under the SAR REGIONS section of this publication.

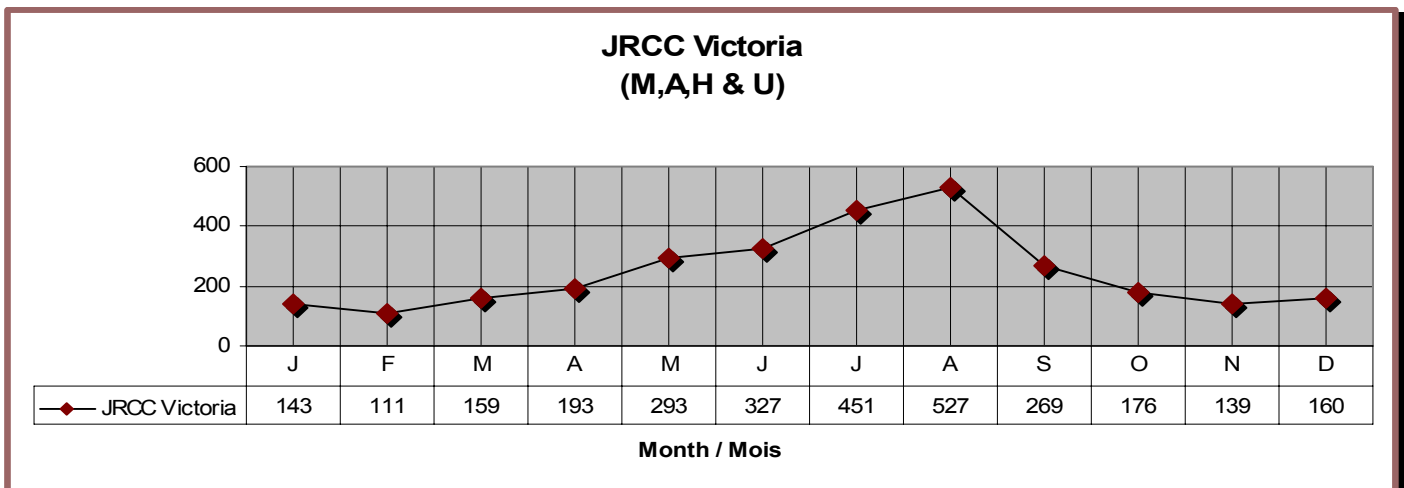
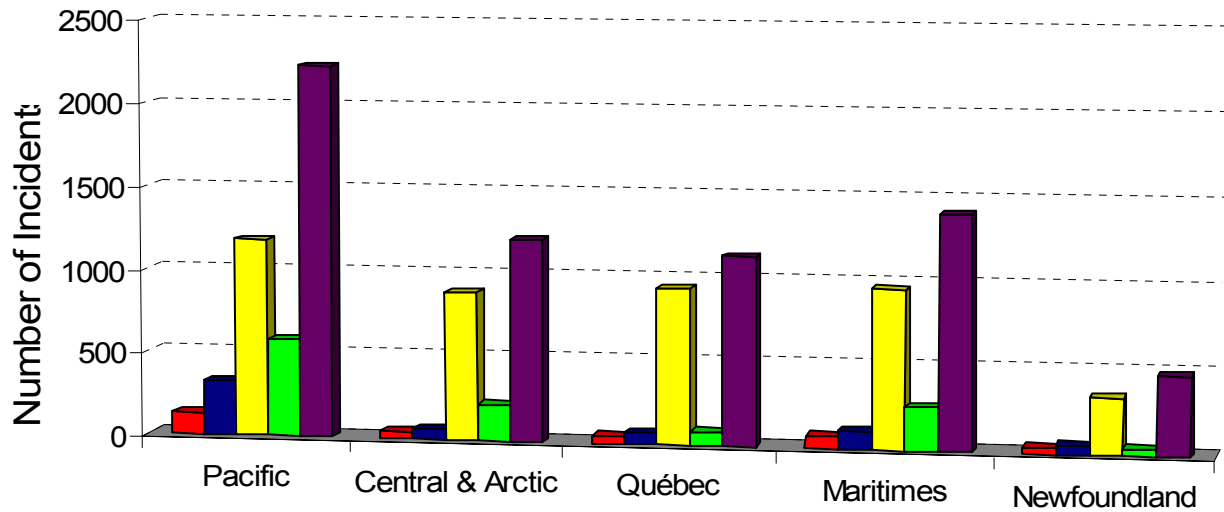


CHART 18 - 2001 MARITIME INCIDENTS – COMPARISON BY CCG REGION

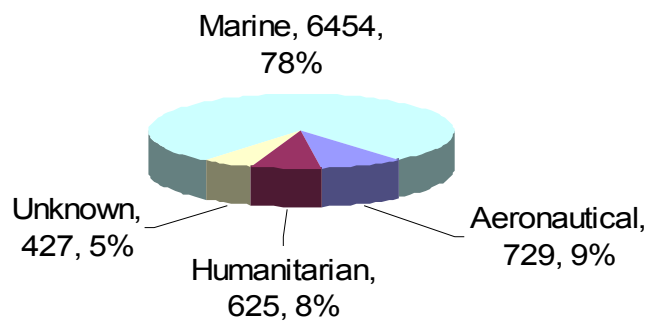
M1, M2, M3 and M4



	Pacific	Central & Arctic	Québec	Maritimes	Newfoundland
■ Distress	130	44	46	77	37
■ Potential Distress	328	61	70	109	56
■ Non-Distress	1186	889	936	956	341
■ False Alarms / Hoax	585	216	83	262	42
■ Total	2229	1210	1135	1404	476

Total for 2001 = 6454 Maritime Incidents

**National Summary of Incidents by Classification M, A, H & U
(Number of Incidents / Percentage)**



CANADIAN COAST GUARD SAR RESOURCES

TYPE	DESCRIPTION	OPERATIONS
600	High Endurance SAR Vessel	Capable of forward deployment and offshore operations in most weather conditions, fully equipped for extended SAR patrols. High endurance, long range, moderate to fast speed. Full SAR facilities onboard. Ice strengthened. 18 knots in sea state 4
500	Intermediate SAR Vessel	Capable of forward deployment and exposed coastal waters operations in most weather conditions, fully equipped for SAR patrols. High endurance with moderate range: 15 knots in sea state 5.
400	Small SAR Vessel	Capable of operations in semi-sheltered water in most weather conditions. Station mode, high endurance, moderate range, and moderate to fast speed. 20 knots in sea state 0.
300	Multi-Task Lifeboat	Medium range lifeboat with moderate to high speed in moderate weather conditions, in sheltered waters - station mode.
300A	Self-Righting High Endurance Lifeboat	All weather lifeboat capable of coastal waters operations in most weather conditions. Station mode, high endurance, moderate range, moderate to fast speed, self-righting. 18 knots in sea state 0.
300B	Self-Righting High Speed Lifeboat	Fast lifeboat capable of coastal waters operations in most weather conditions. Station mode, moderate range, fast speed, self-righting. 25 knots in sea state 0.
200	Ice Strengthened Small SAR Vessel	Capable of operations in inshore ice infested waters. Station mode with intermittent patrol capability. Moderate range. 10 knots in sea state 0.

- 100** Small Rescue Craft Fast craft capable of operations in sheltered waters under most weather conditions. Station mode. 22 knots in sea state 0
- IRB** Inshore Rescue Boat Small, fast rescue boat capable of limited rescue operations in inshore/sheltered waters. Station mode. 25 knots in sea state 0.
- ACV** Air Cushion Vehicle Fast air cushion vehicle capable of operations in all littoral zones and inshore/near shore waters under moderate weather conditions. High speed, station mode. 50 knots in sea state 0.

GLOSSARY OF TERMS

ADRIFT	A vessel has broken away from her moorings/anchor(s) and is floating at random; or a vessel is discovered abandoned at sea and remains afloat (e.g. not capsized).
AERONAUTICAL INCIDENT	An aeronautical incident is a search and rescue (SAR) incident involving an aircraft.
AIRCRAFT	The original vehicle of transport of the person(s) in distress or in need of assistance was an airborne vehicle, regardless of the geographic area in which the vehicle came to rest.
CAPSIZED	A vessel has overturned.
INCIDENT	An individual SAR incident to which is assigned a unique identifier.
CCGA	Canadian Coast Guard Auxiliary (Marine Volunteers).
COLLISION WITH OBJECT	Collision with a wharf, pier, breakwater, dolphin, buoy or such similar object but not running aground.
COLLISION WITH SHIP	A collision between two or more vessels. (includes Mobile Offshore Drilling Unit).
DISABLED	A situation wherein a vessel with people on board is not under command due to human or climatic factors or mechanical breakdown (sailboards, sailboats in high winds, nets caught in prop, strong currents, and dead engine).
DISORIENTED	A vessel's operator is unable to fix his/her position and assistance is required to prevent the vessel standing into danger.
DISTRESS	A SAR incident wherein there is reasonable certainty that one or more individuals are threatened by grave and imminent danger and require immediate assistance.
DISTRESS SIGNAL	Any signal recognized internationally as indicating a craft, person or persons in distress.

FALSE ALARM	Initial information, be it true or not, indicates that a vessel, person or craft is in need of assistance and where subsequent information or investigation proves to be unjustified or fabricated, such as a mistaken report of a flare.
GROUNDING	A vessel is aground or ashore (i.e. resting on solid ground for want of sufficient water).
HOAX	Conveying of information which is done with the intent to deceive.
HUMANITARIAN INCIDENT	A search and rescue (SAR) incident (not aeronautical or maritime) which requires a response by the SAR system.
LIVES LOST	Those persons who died or went missing during the course of a distress incident.
LIVES SAVED	Those persons who were saved as a direct result of a distress or a potential distress incident.
LIVES AT RISK	The sum total of lives saved and lives lost in distress and potential distress incidents.
MARITIME INCIDENT	A search and rescue (SAR) incident involving a vessel or a person, including the medical evacuation (MEDEVAC) of person(s) from a vessel.
MRSC	Marine Rescue Sub-Centre.
MECHANICAL FAILURE	Any mechanical problem including engine, propeller, transmission or steering gear failure.
MEDICAL	The provision of assistance to a person requiring immediate assistance as a result of injury or illness not associated with marine casualty or incident involving a vessel or craft.
OTHER	A marine SAR incident not explicitly categorized by any other definition. This may include such items as sightings of debris. It does not include humanitarian aid or aid to civil authorities such as pollution checks, recovering flotsam, jetsam or lagan that may be a hazard to navigation, aids checks, etc.
PERSON OVERBOARD	A person in the water normally as a result of falling over a ship's or vessel's side.

PRIMARY CG RESOURCES	Those Coast Guard vessels established and equipped specifically for SAR and manned with SAR trained crews.
JRCC	Joint Rescue Coordination Centre.
RESPONSE	Action taken by any unit to render assistance.
SAR INCIDENT	A reported incident which requires a response by the SAR system.
SECONDARY RESOURCES	Aircraft or vessels established for other than SAR, but which can be expected to respond (when available) to SAR taskings.
SORTIE	Action of a resource rendering assistance. Each action comprises a sortie.
TAKING ON WATER	A vessel's watertight integrity is lost through some malfunction, leak, rupture, etc., and the resultant influx of water is unmanageable without extraordinary measures.
TOTAL TIME ON SORTIE	Total time on sortie from homeport/station or diversion from another mission until return homeport/station.
TASKINGS	Deployment of a SAR resource to render assistance.
UNKNOWN INCIDENT	An incident which commences as a search and rescue incident of an unknown type and the source of which is untraced.