

## **CCGA Training Overview**

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## **1 Executive Summary**

"There is nothing stronger than the heart of a volunteer..."

This quote from Lt Colonel Jimmy Doolittle in the movie "Pearl Harbour", has since been used by many volunteer organisations as a telling motto for the commitment and enthusiasm that drives the volunteering spirit in the achievement of a common goal.

The Canadian Coast Guard Auxiliary is no exception and the review of material, interviews and attendance at some regional meetings attest of an Auxiliary spirit that is committed to enrich the SAR system in Canada in the variety of its regional approaches.

## 1.1 Introduction

The five independent Canadian Coast Guard Auxiliaries (CCGA) and their National Corporation partner with the Canadian Coast Guard in support of the maritime SAR system in Canada.

Training is a major, if not critical, component underlying the CCGAs ability to fulfill their missions in a competent and safe manner. The Auxiliary and CCG jointly developed and implemented a National Training Standard in 2001 (NTS2001) with the objective to provide a common reference to the 5 regional corporations in their implementation of a training framework. This Standard intended to identify competency profiles for various roles and the minimum training requirements to fulfill those roles.

Since then, the demographics of the CCGA have been evolving in some regions, diverging regional trends and priorities have taken hold, and the undertaking or proposal of several training initiatives raise questions as to the status of the framework and the evolution of the Standard.

Both the CCG and the Auxiliary believe that the vast majority of the volunteer membership meets the existing Standard, and that many in fact exceed it. However this overview project sought to provide a quick snapshot of the reality underlying this Standard, and to outline some of the challenges and opportunities that lay ahead.

## 1.2 Objectives

The objectives of this review were to provide a national overview (a "snapshot") of ongoing training activities and programs across the five regional auxiliaries and to :

Assess the relevance of those activities to the National Training Standards 2001;

- Identify regional trends, variances and issues affecting CCGA training standards, delivery mechanisms and administration;
- Review recommendations of past evaluations of the CCGA as it pertains to training; and
- Recommend possible course of actions to improve the training portfolio in the CCG-CCGA partnership.

This review did not target training activities related to Boating Safety prevention activities, as the mandate and guidance for the Boating Safety program was transferred to Transport Canada in 2003. However, the review clearly identified a very strong malaise regarding the ongoing issues between TC and the CCGA. Given the historical integration of the Boating Safety function within the CCGA, the outcome in that file could affect membership numbers in at least some areas of the country.

## 1.3 Methodology

This project included the review of training material provided by Auxiliaries or the CCG, telephone or face-to-face interviews with training coordinators and/or business managers within the CCGA, and personnel in the CCG.

CCG	Canadian Coast Guard
CCGA	Canadian Coast Guard Auxiliary
NTS	National Training Standard
SAT	Systems Approach to Training
SIS	SAR Information System
OJT	On-The-Job Training
ALB	All Weather Lifeboat
SMS	SAR Management System

## 1.4 Terminology

## 1.5 Findings and Recommendations

This review clearly indicates that the Auxiliary as a whole has put in place and continues to implement elements of the framework outlined in the National Standard 2001, with the support of the Canadian Coast Guard in each region.

However, three general undercurrents appear to influence each of the 5 regional corporations in their management of the training portfolio:

(a) the fish harvester community of the east provides a service as Auxiliaries because they are professionally linked to maritime activities and see this service as a natural extension,

(b) the mixed membership of the central community is structuring its available resources to support the CCG and the SAR system to the best of its abilities within available means, and

(c) the western community is inclined to align its services along the model of a lifeboat institution, supported by a unique access to external funding

These undercurrents explain to some extent the diverging evolution of the 5 training portfolios, following the inception of NTS2001. Each Auxiliary's action plan is set against specific circumstances, conditions, aspirations, funding realities, style of membership and recruitment/succession issues. Accordingly, regional training and recruitment programs vary in focus, scope and methods. Corporations use their own benchmark criteria and strategies to validate trainer and member competency, program content and training outcomes.

The first version of the National Training Standard provided a reference point to assist the 5 corporations in assuring the minimum level of competency required to safely provide Auxiliary services to the SAR system. It also provided guidance on the key organizational elements needed to manage and deliver cohesive training programs. The CCGAs have responded, each in their own way.

The findings listed below address some elements of the CCGA training system. The associated recommendations offer a possible course of action to strengthen its foundation as a "national" system, yet recognize the above mentioned undercurrents and the probability of continued variances amongst the 5 CCGA training programs.

## F1. The National Training Standards 2001 edition (NTS2001) remains incomplete since its inception.

*R1-A workgroup should be struck between CCG and CCGA to update the Standard with a view to* 

confirm/adjust the common minimum requirements across regions according to the reality of 2008;

define competency standards for the training functional stream;

define or remove competency standards for the administrative stream;

specify clear planning and performance evaluation standards for the training function;

assess the need for competency standards for the operation of fast rescue craft, which are increasing in numbers amongst several regions.

Note: The Canadian Coast Guard College is the appointed Coast Guard custodian of the NTS and, as primary agent for the delivery of CCG training, may be the relevant agent to facilitate this review, as it was in the creation of the Standard in 2000-01.

F2. Most corporations have in place a curriculum that addresses the majority or all of the competency items listed in the NTS2001. However, each curriculum was developed independently, with or without course training standards, master training plans or evaluation material. Without such standardised documentation, it is difficult to validate the extent to which training achieves the desired competency outcome in a consistent fashion across regions, and even within regions. R2 - The CCGA, assisted by the CCG, should undertake the development of national Master Lesson/Course Plans, course training standards and evaluation material for common competencies. This standard reference training material should be wharehoused electronically on a common training network, for easy access and retrieval by any trainer or member of the CCGA. This core material could then be supplemented regionally with training material addressing local requirements.

F3. A significant portion of the training investment is made in On- the-Water Exercises, whether internal to the CCGA, jointly with CCG and/or other agencies, or in the form of competitions. Depending on the assessor involved, these exercises are at times more evaluative (test) than training (learning) in nature. The benefits of these activities are evident in assessing operational competencies, and regions are developing their evaluator/trainer capacity to manage those activities along regional guidelines and procedures.

*R3-* The CCG-CCGA should create a national guide for assessors/evaluators that would consolidate best practices and establish standard procedures. The guide would serve to train assessors/evaluators to a national standard of assessment and evaluation.

F4. The 5 regions of the CCGA are at various stages of organisational development and delivery capacity to meet all intended objectives and competencies of the existing NTS2001. Demographic trends, renewal of regional assets and potentially evolving roles are additional factors bearing on interregional variances. Moreover, regional CCG SAR have the authority to require additional operational competencies that are justified by the circumstances of their own region.

R4- The CCGA should <u>delay any consideration to raise competency standards</u> until such time as the existing standards are met reliably, consistently and broadly amongst its membership through solid and performing training programs. The only exception would be the consideration of a national Fast Rescue Craft Operator competency standard, given the inception of this type of asset in several regions. Other regional needs in excess of the present standards should continue to be dealt with as a regional deviation, as provided for within the existing NTS2001 (updated as per R1).

F5- Training information is exchanged between regions at the management level of the CCGA, but it appears that there is little or no horizontal and direct communication between coordinators/deliverers of the training function across regions. This results in most CCGA training coordinators working in silos with their regional CCG counterparts and independently from other CCGA regions.

R5- CCGA/CCG should establish a knowledge network or forum of training coordinators/deliverers in conjunction with R2 above, to exchange information and share best practices on an ongoing basis. This network should be monitored by a CCG focal point of training expertise.

F6- Zonal training plans for on-the-water exercises or local training sessions can be a hit and miss activity, when planned attendants cancel out. Re-occurrence of onsite training opportunities may be limited and as a consequence some members or units may fall short in competencies or retraining if attendance is not mandatory.

R6-The SAR Management System should be deployed as the training management tool to plan unit and individual training requirements, measure training management performance and perform vessel competency audits. Regions can retain authority as to the method of data entry (centralized or distributed input) that corresponds best to their organizational requirements. The training system's management would become more consistent within regions, and more seamless on a national basis.

F7- Each CCGA corporation developed, with the assistance of CCG or other partners, its own training and evaluation program to train internal instructors and evaluators. While these regional initiatives meet the objectives of the NTS2001, the lack of a CCGA wide approach may lead to inconsistent training delivery outcomes from region to region.

*R7- The CCG/CCGA should consider the creation of a national CCGA instructor/evaluator accreditation program with defined competency standards and components of which could be acquired locally and/or through distance learning from approved sources.* 

## F8- Training Logs have not been implemented or used consistently across the 5 regions since the inception of the concept in the NTS 2001.

R8- The CCG/CCGA should review the need for a Training Log as a National Standard. As regions adopt an integrated training management tool that tracks individual learning path for the member, this particular standard may be perceived as irrelevant to the needs of some corporations. However, should this standard be continued, its upkeep by members should be verified and validated from time to time.

## **F9-** The National Office of the CCGA plays a limited supporting role in the delivery of internal training services to members.

R9- The National CCGA website could provide a common platform (a) to archive all electronic versions of training material produced by CCGA corporations, (b) to host online forums for inter-regional networking of trainers, and (c) to host online training videos or text material that may be produced by CCGAs corporations from time to time. The 6 CCGA corporations should also consider pooling their resources to offer a single portal to interface with all CCGA membership, leaving content management under control of each corporation for specific sections that are relevant to their respective

corporation. This would enhance a common look and feel, encourage cohesiveness and consistency of information, and perhaps grow further the "national" stature of the Auxiliary's body of knowledge and expertise.

F10- While promoting the use of National Standards of Competencies, the CCG relies on regional CCG SAR Training Officers to support each CCGA corporation. The CCG does not have a clear national focal point of training expertise to support, monitor and enhance the cohesiveness of regional CCGA related training activities.

*R10- The CCG should designate a focal point of <u>training</u> expertise to monitor the CCGA training portfolio. This focal point need <u>not</u> be a full time function, and would serve to detect trends and facilitate exchanges between regional training interests.* 

F11- Although training activities target "members" of the CCGA, it is noteworthy that a substantial number of crewmembers aboard owner/operated FVs may not be subjected to any training other than On-the-water exercises, and those resources may not be registered in any training database.

R11- No recommendation. The present Standard describes crew member competencies for <u>registered</u> CCGA members only. Owner- operators are responsible for the competency of non registered crew members, and community-operated units across all corporations are crewed with CCGA members only, who must undertake the relevant CCGA training program.

F12- In a relatively short time frame, CCGA-Pacific has accelerated the renewal of its assets with more capable craft, while implementing new training initiatives, and creating regional crewing standards. The resulting rapid growth in demand on its core training providers may take a toll on their effective deployment or training outcomes in the short term - and weaken the training system's foundation over the medium term.

R12- CCGA-Pacific should give consideration to plan for a "consolidation" phase of 12-18 months where the region would take the time to evaluate each element of its training system for optimal performance, resourcing and cohesiveness.

## 2 Background

See document: <u>www.ccga-gcac.com</u>

The Canadian Coast Guard Auxiliary (CCGA) is a non-profit corporation dedicated to Search and Rescue (SAR) and safe boating activities. The Canadian Coast Guard Auxiliary was formed in 1978/79 in an effort to enhance search and rescue coverage and capability, and to better coordinate volunteer efforts.

There are six Canadian Coast Guard Auxiliaries that are federally incorporated as non profit corporations.

CCGA National Inc.
CCGA Pacific Inc.
CCGA Central & Arctic Inc.
CCGA Quebec Inc.
CCGA Maritimes Inc.
CCGA Newfoundland & Labrador Inc.

Each corporation is a legal entity separate from that of the Government of Canada.

The Presidents of each of the five regional corporations are members of the CCGA National Board of Directors, chaired by an elected Chair and national President. The National Board of Directors oversees the administrative and business requirements that concern every region. The National corporation is not directly involved in the delivery of operational SAR training to members and each of the 5 regions have their own training management and delivery infrastructure, in partnership with their regional counterparts of the Canadian Coast Guard.

The volunteers of the CCGA play a substantial role in Canada's maritime search and rescue system. While they play an important role in SAR prevention and safe boating education activities, they also participate in 25% to 40% of missions carried out in the various regions of the SAR system.

## 2.1 National Statistics

The following statistics were gleaned from the SAR Information System and annual business reports and literature. Their listing below is meant to provide an order of magnitude of various characteristics and a measure of trends and tendencies.

## 2.1.1 Raw Data

## CANADIAN COAST GUARD AUXILIARY NATIONAL STATISTICS 2007 MEMBERSHIP

REGION	MEMBERS	VESSELS
PACIFIC	1158	67
CENTRAL &ARCTIC	775	99
QUEBEC	665	152
MARITIMES	741	438
NEWFOUNDLAND &LABRADOR	927	453

TOTAL	4266	1209

#### NATIONAL ALLOTMENT

YEAR	MEMBERS	VESSELS	CONTRIBUTION ALLOTMENT
1979	731	328	\$ 321,000
2007	4266	1231	\$4,901,000

## **CONTRIBUTION ALLOTMENTS**

<b>REGION/ITEM</b>	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NATIONAL	\$427	\$440K	\$846K	\$778K	\$656K	\$651K
PACIFIC	\$900K	\$863K	\$900K	\$903K	\$934K	\$934K
CENTRAL & ARCTIC	\$545K	\$522K	\$545K	\$588K	\$644K	\$644K
QUEBEC	\$615K	\$590K	\$590K	\$619K	\$645K	\$638K
MARITIMES	\$570K	\$546K	\$570K	\$600K	\$626K	\$626K
NEWFOUNDLAND &LABRADOR	\$600K	\$584K	\$600K	\$620K	\$641K	\$648K
INSURANCE	\$678K	\$810K	\$701K	\$703K	\$715K	\$700K
SAR OPERATIONAL RESERVE	\$125K	\$105K	\$109K	\$ 50K	\$0K	\$0K
ISAR COMPETITION	\$40K	\$ 40K	\$ 40K	\$ 40K	\$40K	\$60K
TOTAL	\$4,500K	\$4,500K	\$4,901K	\$4,901K	\$4,901K	\$4,901K

#### CCGA TASKINGS & CCGA INCIDENTS

YEAR	TOTAL MARITIME TASKINGS	TOTAL CCGA TASKINGS	% OF ANNUAL TOTAL	TOTAL SAR INCIDENTS	TOTAL INCIDENTS TO WHICH CCGA RESPONDED	% OF ANNUAL TOTAL
1979	6566	394	6%	N/A	N/A	N/A
1980	7604	804	11%	N/A	N/A	N/A

1981	6755	915	14%	N/A	N/A	N/A
YEAR	TOTAL MARITIME TASKINGS	TOTAL CCGA TASKINGS	% OF ANNUAL TOTAL	TOTAL SAR INCIDENTS	TOTAL INCIDENTS TO WHICH CCGA RESPONDED	% OF ANNUAL TOTAL
1982	8562	1122	13%	N/A	N/A	N/A
1987	7974	2143	27%	4665	257	6%
1992	7214	1779	25%	3710	828	22%
1997	8182	1751	21%	6854	1582	23%
2002	9663	2204	23%	8010	1958	24%
2003	8586	2030	24%	7498	1851	25%
2004	8468	1817	21%	7486	1654	22%
2005	N/A	1649	N/A	N/A	1531	N/A
2006	N/A	1804	N/A	N/A	1522	N/A

Note: Total SAR incidents and total incidents to which CCGA responded include maritime, air and humanitarian cases.

#### NATIONAL CCGA SUMMARY STATISTICS

The CCGA currently has 4266 members and 1209 enrolled vessels. **In 2006** the CCGA were tasked 1804 times to 1535 SAR cases and participated in 1356 training exercises. They also participated in 389 boat shows, exhibitions and displays to aid the boating safety program. Auxiliary volunteers also conducted 3010 courtesy examinations.

Total number of hours nationally for SAR Operations – 10,516

Total number of hours nationally for boating safety activities – 32,463

Total number of hours nationally for public education activities – 1,725

Total number of hours nationally for all other activities - 167,542

Grand total of hours -212,246

#### 2.1.2 Modified Data

The table below outlines aggregate averages and co-relation between membership, asset base and taskings.

<u>Note</u>: Registered membership linked to fishing vessels usually includes only the owner/operator of the vessel, and perhaps one assistant or crew. Given the transient and seasonal nature of crewing aboard fishing vessels, a substantial number of fishing vessel crew members are <u>not</u> CCGA members, but may be involved in taskings or on-the-water exercises without their presence being captured in any CCGA database or

the statistics in the table below. This contrasts with community-based vessels where all crew members will be registered CCGA members.

Summary Statistics for National Training Review

Region	Members	Vessels	Membership/ Vessel ( 2006)	Aver. Tasking/VL/Yr (5yrs)	Aver.Task'g/VL/YR (2006)	Allot. 07/08
NAT	-	-	-	-		\$651K
PAC	1158	67	17.3	878/101= 8	12.7	\$934K
C& A	775	99	9.7	204/119=1.7	1.9	\$644K
QBC	665	152	4.4	417/165=2.5	2.4	\$638K
MAR	741	438	1.7	209/442=0.5	0.5	\$626K
N & L	927	453	2	170/471= 0.4	0.4	\$648K
TOTAL	4266	1209	3.5	1878/1298=1.4	1.5	\$4,9M

Average tasking of CCGA units as a percentage of overall SAR taskings ranges annually between 20% and 25% (national) – therefore a substantial portion of resources accessed by the SAR system.

Note: Discrepancy in number of vessels between allotment table and membership table in prevous section

#### 2.1.3 Accidents Data

The table below lists accidents reported by the 5 CCGAs in the past 7 years (since inception of the NTS2001). Many of those accidents did not generate insurance claims, but most were training related, and concentrated in one region.

Many factors contribute to training accidents (including, but not exclusively, the volume of training hours, the severity of the exercise, the weather conditions and the state of crew readiness). Some minor accidents may even go unreported. Therefore, one should exercise caution in drawing any firm conclusion from these statistics. However, standard operational training is normally conducted under controlled conditions in order to maximize learning potential and minimise risks of injury. Statistics are one but many measures helping organizations avoid thinking that training injury is just part of a risky job.

Date of Injury	Nature of the Injury	Geographical Location	SAR/Boating Safety activities
25/04/2004	Muscle Strain Chest	Anderson Cove, BC	Training accident
07/10/2005	Twisted ankle when boarding vessel	Coast Guard dock , Hay River NT	Training accident
23/04/2005	Fell and injured right shoulder and leg, no fracture	Chambly, QC	Training accident
05/11/2007	Death	Saltons, in Terra Nova Nat. Park NF	Death
22/09/2004	Dislocated Left Shoulder	Banfield, BC	Heart attack

24/04/2005	Twisted Knee	Comox Harbour, BC	Training accident
31/01/2004	Injury to face, shoulder and leg	Off Point Roberts Bell Buoy, BC	Sar
Date of Injury	Nature of the Injury	Geographical Location	SAR/Boating Safety activities
27/03/2007	Sore (L) elbow, tailbone and mid back	Between Clark Rock & Pipers Beach, BC	Sar
28/03/2004	Injury to right ankle	Sansom Narrows, BC	Training accident
01/02/2004	Injured Hand	Fraser River, New Westminster Quay BC	Training accident
10/05/2007	Two broken molars on (L) side,	Ganges Harbour, BC	Training accident
	possible concussion internal hematomd,		
	body misalignment, emotional trauma		
09/06/2007	Injury to left arm and reports of a compound fracture to same	Ganges Centennial Park, BC	Training accident
22/09/2007	Broke and Dislocated right ankle	Sooke, BC	Training accident
23/08/2006	Injury (twisted) right knee	Westview North Harbour, BC	Training accident
20/06/2004	Minor scratches and bruising	Howe Sound, BC	Training accident
11/07/2004	Broken lower front teeth	Beecher Bay, BC	Training accident
07/12/2003	Dislocated right shoulder	Crystal Pool - Victoria Aquatic Center BC	Land-based training(swimming pool)
13/02/2001	Car accident	Prince Philip Dr./Allandale Road, NF	Automobile accident while attending meeting
17/01/2007	A mild heart attack	Panache, just south of fisherman's cove BC	Training accident
15/08/2003	Injury of right knee	Shoal Channel, out of Gibsons Harbour BC	Tasking incident
26/05/2005	Injured back	Mary Todd Island BC	Training accident
02/11/2003	fractured left wrist	3 miles nw Entrance iland BC	Training accident
14/02/2005	Two molars cracked & broken	Gibson's Harbour BC	Training accident
26/05/2005	Bruised ribs	Mary Todd Island BC	Training accident
20/06/2004	Soft tissue injury to cartilage and upper gum	Howe Sound, BC	Training accident
14/02/2004	Injury of right knee	Sooke Harbour Marina, BC	Training accident

29/06/2006	Sprained right ankle	CCIN, Burlington ON84	Training accident
TOTAL :	> $PAC(22) \rightarrow C\&A(2) \rightarrow N\&L(2) \rightarrow$	$O(1) \rightarrow Mar(0)$ (total injuries 2001-2	007 period)

## 2.2 Training Standard 2001

The <u>National Training Standard 2001</u> (NTS2001) was created in 2000/01 with a view to provide a minimum set of agreed standards of competency, curriculum design, training delivery and equivalency assessment criteria across the Auxiliary. The first and only version of the document resulted from the efforts of a working group representing a cross segment of CCG personnel and CCGA members having interest in the training portfolio of the CCGA. The Canadian Coast Guard College facilitated the process which resulted in the publication of the Standard in March 2001.

The document had for objectives to outline roles and competencies for the main functional streams that support CCGA activities, that is, the administration, operation and training functions.

The NTS2001 addressed the operational function fully, both describing the respective roles of Crew Member and the Owner/Operator, as well as the competency standards related to the knowledge and skills supporting those roles. The administrative and training roles were described, but related competency standards were, and remain undefined.

Excerpts from the Standard 2001 document are also listed below, along with corresponding observations that arose from the training review project:

#### 1.1 General

"...The National Training Standard sets out the **minimum training requirements** and certification standards for CCGA members...the standard is written in such a manner that other aspects of SAR and Environmental Response can be included. These may be implemented jointly by CCGA/CCG. "

**NTS-0.1**: a The great variances in characteristics between Auxiliaries fully justify retaining this minimalist approach at this point. In its updated format and audit and compliance checks, the NTS 2001 will continue to offer some level of assurance to the National SAR System as the competency do CCGA crews in the conduct of their missions. Augmentation of the National Training Standard (other than for the operation of Fast Rescue Craft now present in several regions) would face challenges within some Auxiliaries at this time.

b. The Environmental Response program could become a greater user of CCGA capability, especially in remote regions such as the Arctic. This would have an impact on the training requirements and the definition of training standards, at least on a regional basis where applicable.

#### 1.4 References

**NTS-O.2**: *The list of references should be reviewed and updated as required. Note that TP9224 (SAR Skills Standards) dates back to 1994 and has been renumbered and parceled into* 

sub/programs that are now in existence. The CCGA-Pacific SAR Crew manual is also now in use as a reference across all Auxiliaries. Courses designed or in development by the Coast Guard may also be useful inclusions in as NTS reference material on standards.

#### 2.1 Principles

"...CCGA members should obtain qualifications for **Administrative** and **Training** roles (see 3.1.1) before being considered competent to perform the duties required by that role..."

NTS-O.3: Competency standards have yet to be defined for these two categories.

"These minimum qualifications may be obtained through training, or as demonstrated through the endorsement of previous learning and experience."

**NTS-0.3a**: CCGA-Maritimes and CCGA-Newfoundland & Labrador make extensive use of this endorsement with respect to professional mariners belonging to the fishing community. This endorsement is left at the joint regional CCG-CCGA discretion. Without clear cross- references between prior training/certification curriculum and NTS competency standards, these endorsements offer limited assurances that members meet all specified SAR related competency standards under generally accepted practices of equivalency assessments.

"In order to maintain some qualifications there may be a requirement for revalidation training as indicated in this standard or by a specific training program."

**NTS-O.3b**: This principle leaves all non regulatory revalidation training to the discretion of each CCGA corporation as there is no national standard addressing this particular continued proficiency issue.

#### 2.3 Objectives

".6 - Support, as far as is practicable, the consistent application of standard operating procedures by CCGA"

**NTS-O.4**: Given the lack of a national curriculum, master lesson plans and guides, and the regional nature of instructional standards, consistency of application may be more aptly qualified at the regional level than the national level.

#### 2.4 Training Logs

"A CCGA Training Log should be issued upon joining the CCGA....

...CCGA regions are encouraged to use the CCGA Training Log as presented in this standard (annex 4) "

**NTS-0.5**: Training logs are not used in all 5 Auxiliaries at the time of this review, partly due to lack of implementation or other organizational and training priorities. Administrative database is the preferred approach to monitoring profiles in most regions. The adoption of the SAR Management System may offer an opportunity to review the necessity or purpose of the training log where the SMS is used. As a point of interest, the CCGA-Pacific training log differs from the template offered in the NTS2001 and was designed with a level of details that would almost qualify it as job aid or personal learning plan for each of the basic, advanced crew and coxswain standard. That model of training log would be a benchmark should the concept remain as a National Standard - however its content would likely need to be adapted to regional variances.

#### 2.5 Recognition of CCGA Training Logs

"If training has been conducted in accordance with this Standard, CCGA Associations should recognise training provided to CCGA members as noted in the CCGA Training Log, irrespective of the Association in which the training was provided."

**NTS-O.6**: This inter regional recognition is not tested frequently, if at all. However the absence on a truly national curriculum, master lesson plans, and uniform assessment/evaluation/instructional standards may create barriers to inter-regional recognitions.

#### 3.1.1. CCGA Roles

CCGA functions are regrouped under 3 streams of functions: Operational, Administrative and Training.

"CCGA members must only be authorised to undertake duties associated with Operational roles when they have successfully completed related training requirements as noted in the CCGA Training Log"

**NTS-0.7**: Only a safety management verification system can attest wether or not this is actually the case. Otherwise the system relies on Owner Operator or Coxswain judgement and responsibility. The SAR Management System in place in CCGA-Pacific allows for a quick electronic audit of crew competencies after SAR taskings.

"CCGA qualifications should be indicated for the role(s) that a CCGA member may undertake, and all training and endorsements should relate directly to one or more of these roles. These qualifications should be awarded after successful completion of training established in accordance with this Standard and should be noted with appropriate endorsements recorded in the CCGA Training Log.

**NTS-O.8:** This appears to somewhat contradict other statements in the Standard allowing the recognition of other, similar training or experience to meet the standards of qualification. Whether or not an entry is made in the Training Log is not consistently verified across regions.

#### 3.2 CCGA Operations Roles and Competency Standards

**NTS-0.9**: The roles of Owner/Operator, Crew member and Safe Boating Specialist are described in the NTS2001. However the corresponding competency standards for the Safe Boating Specialist have been left undefined since the NTS inception. While the monitoring of the SBS training program has now shifted to Transport Canada, and that issues remain pending resolution between the CCGA and TC, CCGA should nevertheless attempt to complete the national standard of competency for the Safe Boating Specialist as it has been an important and integral part of its activities to date.

#### 3.3 CCGA Administration

"General role descriptions for Zone/District Directors, Unit leaders, General Officer of the Association and Members can be found in Annex 2 of this document. These can be further amplified by referring to the appropriate regional documentation." **NTS-0.10**: The corresponding competency standards have been left undefined for the past 7 years. Whether this is due to the lack of standardised procedures, administrative systems, or insufficient resource allocation to tackle their definition, this is indicative of lower priority in the overall allocation of efforts. A review of the NTS should validate or remove the need to define competencies for these roles.

**NTS-0.11**: The administration function of any organization is important to ensure the effective and efficient operation of its elements. Role descriptions normally lead to the definition of job descriptions. Tasks definition, on the other hand, normally lead to competency standards. Given the variety of regional circumstances and until such time as common administrative and information systems are broadly adopted, it may be advisable to only focus on clear, concise regional job descriptions, concise procedural job aids fitting each corporation, rather than invest in developing a standard. Mentoring and succession planning, combined with procedural job aids, are very effective tools to achieve optimal performance on the job.

#### 3.4 Training

"CCGA and CCG Authorities should ensure that instructors are appropriately qualified and experienced for the particular types and levels of training duties assigned to them according to the corresponding assessment of competence described in the Competence Tables in this standard.

General role descriptions for Training Co-ordinator, Instructor and Assessor can be found in Annex 3 of this document. These can be further amplified by referring to the appropriate regional documentation."

**NTS-0.12**: Same comment as **NTS-0.10**. However, the training and training standards are at the core of activities supporting the safe and efficient delivery of CCGA SAR missions. The lack of national competency standards for all streams of the training function impedes the achievement of common competencies and may lead to inconsistent training delivery and evaluation outcomes across the entire CCGA. The definition of those competencies and the training of instructors and evaluators to national standards of competency is the only path to ensuring standard outcomes of training.

#### 3.4 Training - Figure 3.4.1 SAR Training Structure

"A new SAR Training Structure is underdevelopment, however it is envisioned that it will reflect five (5) main roles "Operations, Administration, Co-ordination, Clients and Training. Each of these roles, regardless of their departmental or regional representation, will receive training to meet the competencies identified and indicated in the SAR Training Standard (*presently under development*)."

**NTS-0.13**: There is no indication in this section as to who was to develop this training structure and what the projected timeline was. In fact, it appears that this section was a statement of intent that remained at least partially unfulfilled. This section should be reviewed and replaced with, at a minimum, a CCG-CCGA performance improvement cycle starting with the definition and implementation of competency standards, design and delivery of training, performance measurement of training outcomes, and feedback mechanism at each step of the cycle.

#### 4.1 Selection for Training- Entry Standards

"Candidates for CCGA training must meet the admittance qualifications as set out in the National Guidelines respecting Canadian Coast Guard Auxiliary Activities and the Regional Bylaws of each association". **NTS-0.14**: Entry level requirements to training normally differ from entry level requirement for joining an organization. Entry level to training is normally specific to a training program or stream and normally refers to entry level competencies, certification or experience that suitably prepares the individual to undertake the training program. For example the entry level competency of an aspiring Safe Boating Specialist may differ from that of a CCGA administrator or a Coxswain of a Fast Rescue Craft. Specific entry level standards to each functional stream should be the norm.

• "Be able to contribute in some other way which would be of benefit to the Search and Rescue organization and/or the CCGA"

**NTS-O.15**: It is difficult to qualify this as a standard, without scoping the said ability to contribute.

#### 5.3.1 CCGA Training Log

"The CCGA Training Log, as illustrated in this standard (annex 4), should be presented to candidates on acceptance into the CCGA".

**NTS-0.16**: Regional Training Logs vary in format from the template provided within the NTS2001 to the model in use in CCGA-Pacific. Whether or not it is issued upon a candidate's acceptance, its use has been inconsistent across regions and even within regions.

Further in Annex 4- Training Log:

"The CCGA Training Log is to be used either as a replacement to or in conjunction with existing methods of tracking training in the respective CCGA Associations".

**NTS-0.16a**: The new SAR Management System is in place in one region with 2 more regions planning near term implementation. The purpose and continued use of the Training Log as a National Standard should be re- affirmed or modified, given its inconsistent use or monitoring, and the availability of alternate recording and monitoring systems to track member training.

#### 6.1 Training

" It is expected that the CCGA/CCG will use a curriculum, training materials and/or equivalencies that meet the requirements of this standard."

**NTS-0.17**: All corporations employ their own curriculum, training materials and/or equivalencies to qualify members and their instructors/assessors. Due to the demographics of membership, CCGA-Pacific is leaning heavily on instruction and a training curriculum, whereas CCGA-Newfoundland & Labrador leans heavily on equivalency endorsements (and therefore relatively little instructional/assessment).

"All training and assessment of CCGA Members should be:

- .1 structured in accordance with written programmes, including methods and media of delivery, procedures, and course material required to achieve the prescribed standard of competence; and
- .2 conducted, monitored, assessed and supported by persons qualified in accordance with section 3.4 and 5.5 (of this Standard).

All training courses that are based on this Standard shall be quality approved, as appropriate, by mutual agreement of the CCGA and CCG authorities concerned."

**NTS-0.18** It is difficult to attest the extent to which each regional program actually reaches the outcomes defined in the national competency standards. Instructor/evaluators are "qualified" via the respective regional procedures involving the CCG Training Officer. Whether training delivery or practical evaluations meet with the NTS2001 can only be verified through audit checks and regular monitoring, which depends on the availability and presence of the CCG SAR Training Officer or, in the case of CCGA-Pacific, a member of the ARTE team. Given the workload of each CCG training officer, this availability is not consistent.

#### 6.3 **Operations**

#### 6.3.1 Crewmember

" Completion of the training required for crewmember shall be achieved by demonstrating the competence factors required (see Competence Table 1), or through successfully undertaking training in the following areas:

Communications SAR Administration SAR Readiness Search Operations Rescue Operations Training and Development Public/Media Relations"

**NTS 0.19**: Noteworthy is the fact that fishing vessels will have their owner/operator registered as a CCGA member, while crew members will often not be CCGA members. Although being mariners by trade, those crew members will not be exposed (or exposed consistently) to CCGA training other than on-the-water exercises.

In general Public/Media relations are not a predominent feature of crew member level training anywhere.

#### 6.3.2 Owner/Operator

"Completion of the training required for owner/operator <u>shall</u> be achieved by demonstrating the competence factors required (see Competence Table 2), or through successfully completing training in the following areas..."

**NTS 0.20**: Equivalencies are not, but should be, mentioned in this text, as they are granted regularly to owner operators of the fishing vessel community. Equivalencies are not subject to demonstration of competence or completion of any specific course, except for periodic on-the-water exercises. As stated in 6.1, "it is expected that the CCGA/CCG will use a curriculum, training materials <u>and/or equivalencies</u> that meet the requirements".

#### 6.6.1 Theoretical Training Courses

"Knowledge must be assessed in a manner appropriate to the presentation, reflecting the competencies as set out in the Tables."

#### 6.6.2 Practical Training Exercises

"CCGA members should receive practical training, ...from qualified instructors.... This training may take the form of exercises."

**NTS 0.21**: Instructors are indeed "qualified", based on regional criteria. Regions do indeed use exercises as a main venue for training members.

"Practical training exercises must be assessed in an appropriate manner that relates to the competencies as set out in the Tables."

**NTS 0.22**: Without any specific and common criteria, the assessment or evaluation process **may** produce outcomes that vary greatly between regions. However, Regions do have, for the most part, a program in place to train assessor/evaluators to a common regional practice.

The incomplete stage of the NTS2001 - as it relates to its original intent - and the absence of any update since inception, may reflect diverging views amongst CCGA corporations as to how common these standards ought to be or (and) the lack or resources to tackle this fundamental element of a national system. In addition, the Coast Guard College has not played any role in this portfolio since inception, after facilitating the process that led to the creation of the NTS2001, and inspite of being identified as the custodian of the NTS2001 on behalf of the CCG. The identification of a national monitoring role (with training expertise) within the CCG would help adjusting the standards incrementally and nationally in partnership with the CCGA. This could possibly avoid divergences in methods, practices and regional standards, avoid duplication of efforts, and help consolidating and cross referencing modular training material developed in all regions.

#### 2.3 CCGA Evaluations by DFO

The CCGA was the subject of two separate evaluations by DFO Evaluation and Audit Branch since the inception of the National Training Standard in 2001. These evaluations were not specifically tasked to examine the Training function. However, both contained observations or recommendations as a result of their research and analysis.

#### 2.3.1 Canadian Coast Guard Auxiliary Evaluation - 2003

The recommendations of the CCGA Evaluation 2003 contained the following recommendations:

#### "It is recommended that the CCG ensure that the National Association and the CCGA Associations develop an internal communication strategy to facilitate the sharing of information, best practices and other related tools amongst regional auxiliaries."

The 6 Auxiliary corporations make use of regular newsletters that provide information of various nature, including some associated with training. Although not a target of the above recommendation, it is noted that there is no specific interregional training network amongst peers other than communications conveyed via CCGA Presidents or Business Managers. Horizontal networking of trainers is a recognized best practice in training design and development, by tapping the knowledge base of a broader network of peers when tackling competency issues and devising training solutions.

## "It is recommended that the CCG ensure that the CCGA capture, in a more national and systematic manner, all data relating to cost-effectiveness."

The SAR Management System developed by the CCGA-Pacific and planned for implementation in 2 more regional corporations along with the national corporation, would also serve training information management needs of a national training system.

# "It is recommended that the CCG encourage the National Association to collate all regional data and information into one seamless database that could be readily accessible to both the CCG and the CCGA."

The SAR Management System can provide CCG/CCGA with readily accessible data on CCGA training program output.CCG could access this database directly or via a standard data import/export protocole. In addition, CCG/CCGA could conduct post-tasking competency audits of units deployed on SAR mission.

#### 2.3.2 Evaluation of the Contribution to the CCGA 2007

The 2007 <u>Evaluation of the CCGA Contribution Agreement</u> highlighted two training areas that needed improvement:

# **1.** The CCGA RMAF (to be) revised to include a performance measurement strategy that identifies key activities, including <u>training</u> and specifies expected outputs and outcomes and appropriate performance indicators to assess them.

The training/human performance management portfolio should normally be composed of the following 6 elements:

- the complete inventory of competency requirements and associated standards for a target group (CCGA region, zone, unit, and vessel)
- inventory of achieved competencies within membership
- identification of competency gaps per unit group
- identification of strategies to close the competency gaps (training, procedural job aids, recruitment, succession mentoring, coaching etc.)
- identification of single year/multiyear action plan with resource requirements, time lines and performance indicators
- tracking and reporting system to monitor progress.

The National Training Standard, even in its incomplete format, already details competencies and standards needed in some of the CCGA functional streams. The completion of the NTS would enhance that inventory.

Each region maintains a database of certification achieved or training undertaken. Some training databases are more centralized, stand- alone and manual in nature, while others have moved or are in the midst of moving to a fully integrated and web-capable system.

Each region plans for training delivery. However it is unclear to what extent the training plans are consistently addressing competency gaps and prioritization of needs. For instance, On-the-water exercises can be a hit-and-miss event should a portion of members cancel out on the activity, with resulting competency gaps remaining unfilled.

The achievement of annual training goals is reported on an aggregate basis (e.g. total number of hours). This reporting could be enhanced by providing a gap measurement between plans and outputs, for a better identification of trends and deficiencies.

# 2. The roles and responsibilities in the contribution agreement are revised to clearly identify who is responsible for ensuring Auxiliary members meet CCG/CCGA training standards, including the monitoring and reporting of such activities.

The CCG presently does not offer a national focal point of expertise for the monitoring of CCGA training systems, and relies on the vertical relationships that exists between CCG and CCGA in each region, and on annual or adhoc reporting of training activities. While the CCG College is the official custodian of the NTS2001, it was not tasked or mandated to provide any other support role in the CCGA training system.

The National CCGA performs supportive functions without direct coordination or audit capability of the regional training activities.

In brief, the monitoring of the implementation of a National Training Standard is presently a regional function that is based on regional priorities and objectives, using regional databases to plan, monitor and report on annual training activities. The increasing implementation of the SAR Management System across regions will help the National CCG/CCGA in exercising a monitoring role, to the extent that all regional systems become fully integrated.

## **3 CCGA National**

The four strategic mandates of the CCGA National Office are:

- 1. To provide Services to CCGA Members;
- 2. To run Marketing and External Communication programs;
- 3. To implement National Fundraising Initiatives;
- 4. To conduct Administrative Functions.

CCGA National therefore has no mandate for the direct provision of training to members. It can (and does) from time to time play a role in facilitating access to funding for national or regional training initiatives, or support training administration through the provision of printing and dissemination of manuals or documents. It does provide national communication service in the form of E-newsletters, publication of the *Auxiliarist* in printed version, and the maintenance and operation of a <u>National Web site</u> and a secondary <u>ISAR Web site</u>.

According to the 2007-08 Business Plan, the CCGA National Office has been involved in a number of projects in recent years, aimed at providing Auxiliarists with various training tools, documentation and opportunities to enhance their skills.

In the previous business plan period, Fundraising efforts by the National Office were successful in securing a two-year agreement with Exxon-Mobil Canada to fund the \$200,000.00 Atlantic Canada SAR Training Program for members of the CCGA in Newfoundland and Labrador and the Maritimes.

The office also collaborated to the translation of the PCCC Training Video developed by the Office of Boating Safety in the C&A region.

The National office has also contributed to the development of the following tools:

- SAR Seamanship Reference Manual;
- National Training Standards;
- Training Logs;
- International SAR Competition;
- Translation and distribution of the SAR Crew Manual;
- Production of a training video for operators of Bobbie the Safety Boat.

The <u>CCGA National Web site</u> acts as a portal of information for public consumption, and broadly disseminates information on all aspects of its operations and *raison d'être*. It also acts as an internal hub where some documents of national scope are archived and links to regional information are, to a limited extent, made available.

A conversation with the national President highlighted his view that the CCGA should aim to achieve standards that are similar in scope to the *Common Standard of Training for Maritime SAR Unit Coxswains, Mechanics and Crew Members* from the <u>International</u> Maritime Rescue Federation (formerly called International Lifeboat Federation). The national President also expressed that the CCGA needs to achieve higher standards of training in terms of liability and image. Examples given were the NetSim and Full Mission Simulator projects, and the SAR Management System (SMS), all 3 initiatives originating in CCGA-Pacific. He hoped full implementation of the SMS within all 6 CCGA administrations would be completed in 2009, in order to achieve a seamless integration of all information across Auxiliairies.

#### 3.1 Issues and Observations

The National corporation offers the potential to bridge regions in the direct transfer of training knowledge. The national website could be used to archive all training material used in the entire network of training. It could also feature a knowledge base or forum for trainers to seek and exchange ideas and solutions.

The wording of the National Standard 2001 gives a broad flexibility to each region of the CCGA to meet the objectives of this Standard. Each region clearly has a specific set of conditions, strength, challenges and opportunities that influence its approaches in the training domain. These approaches span from the extensive use of equivalency endorsement for external certification and experience, to the structuring of a complete training system with the aim to go beyond the existing standard.

The view expressed by the national President that the "ideal state" of the CCGA is to achieve national standards similar in concept, if not in details, to the IMRF's "*Common Standard of Training for Maritime SAR Unit Coxswains, Mechanics and Crewmembers*" does not appear to be shared yet by any region except Pacific. However, should it become a strategic objective of the entire Auxiliary, a first step would be to establish an inter-regional project team to complete and update the yet "unfinished" NTS2001, so to lay the foundation for the evolutionary future of the Auxiliary.

## **4 Regional Training Programs**

Each region approaches the need assessment, development and delivery of training programs according to the background of their membership, the asset base of their fleet, the geographical distribution of their members, and the guidelines associated with the CCGA National Training Standard 2001

The independence of the 5 Auxiliaries, trends in volunteerism, changing demographics, and the broad spectrum of educational and professional experience found throughout the Auxiliary from coast to coast pose a serious challenge to the establishment of a uniform pan- national implementation of standards.

The brief outline of activities taking place in each region reflects the adoption of different approaches within available means and operational priorities. Although progress is evident in the organization, administration and delivery of training, some measures will be suggested to assist the achievement of the desired training outcomes.

Training Standards are derived from job competency profiles that are linked to operational requirements. Although the baseline of competencies required to carry out a search and rescue mission may be consistent across regions, the specific operational context and conditions that vary within and across regions will also justify variances in competencies and their method of achievement. That is the main reason why the National Standard should remain as broad and and flexible as it is, so that regions can engage in directions that meet their specific needs.

## 4.1 Newfoundland and Labrador

In Newfoundland and Labrador, the reliance on Coast Guard Auxiliary in SAR response is higher than average, tallying as much as 40% of annual SAR responses in that region. Auxiliary members are often the first SAR units on scene, given their geographical distribution or their professional activities within certain areas of increased marine traffic.

Auxiliary members are asked to perform a wide variety of SAR functions including the provision of first aid, towing and de-watering assistance, conducting visual and electronic searches, rescue of survivors at sea, and promotion of maritime safety.

The majority of volunteer resources in the Newfoundland & Labrador area are professional mariners with various levels of certification. Therefore, CCG/CCGA-Newfoundland & Labrador deems training in advanced seamanship or navigation to be less critical or necessary as in some other regions of the country. The Regional CCG and CCGA conduct a case by case review of applicants for membership, and equivalency status is granted against relevant elements of the National Standard in corelation with the applicant's certification and experience.

<u>Note</u>: many crew members on fishing vessel are not CCGA members, therefore not subject to any of the CCGA standards, apart from the on-the-water exercises to which their vessel owners would participate.

The region presently does not normally provide classroom training in specific SAR procedures over and above the initial briefing by the CCG-CCGA staff upon application. There is no specific training related to On Scene Command function, as members are deemed adequately prepared with their professional qualifications and the knowledge of operational guidelines.

## 4.1.1 Statistics

CCGA (NL) Inc. boasts a membership of approximately 924 members and 447 vessels. The average value of the 453 vessels in CCGA Newfoundland is \$538,289. In 2006, 15 CCGA (N) members assisted in 8 boating safety displays and 27 CCGA vessels took part in 22 training exercises. CCGA-NL was tasked 179 times to 157 SAR cases.

The total number of hours for SAR Operations was 6,245 and boating safety activities 387.

CCGA Newfoundland has 2 full time employees.

CCGA-NL membership and vessel complement are approximately 95% professional fish harvesters . Of this 95% - approximately 85% hold marine certification from Transport Canada ranging from Fishing Masters to Master Mariners. The majority of the remainder of its membership has completed or will complete a small vessel operator training or pleasure craft operator certificate.

YEAR	MEMBERS	VESSELS	TASKINGS
1979	119	55	20
1980	174	71	38
2001	954	465	239
2002	1018	483	219
2003	1035	470	188
2004	969	479	140
2005	956	474	125
2006	927	453	179

## CCGA NEWFOUNDLAND

## 4.1.2 Training Activities

Most of the training activities taking place in CCGA- Newfoundland & Labrador are aimed at practical, on-the- water exercises. Each year, several exercises involve DND

(e.g. 6 in 2007) - often at the request of DND. Overall about 20 exercises a year involve the CCG, which last 1-1.5 hour each.

There is no SAR related training other than the briefing at the membership application stage. Members are given the operating guidelines and the SAR Crew Manual (from CCGA- Pacific) and are briefed on their content.

Aside from first aid training and on-the-water exercises, there is typically no other substantive operational training provided.

As outlined by CCGA- Newfoundland & Labrador in an October 2007 correspondence:

"The membership-applicant must provide copies of any marine certificates held, so to ensure the owner/operator is fully qualified for the classification of voyage and nature of work of the vessel.

The CCG Training Officer, along with CCGA-NL staff meet with and brief the candidate of the Regional SAR Operational Guidelines for CCGA members. These guidelines cover, along with some other operational content, administration, insurance provision, search patterns, radio communications, search and rescue procedures and techniques, and reporting structure. The CCG Training Officer would inspect the applicant's vessel is a FV under 15GT or a pleasure craft, to ensure compliance with regulations.

Once the member is approved, copies of the Regional and National Guidelines are issued, along with the Log Book, and necessary forms and paraphernalia. "

At the time of this review, CCGA-NL was preparing a training package intended for approximately 140 members whose vessel is under 15GRT, and not having to meet certain regulatory safety standards with respect to EPIRBS, lifesaving appliances, personal lifesaving equipment, or the conduct of safety checks. The aim of the training is to entice those owners to go beyond what they are strictly required by law, which is minimal at best. This training was planned to begin in the spring of 2008.

## 4.1.3 Training Management

The regional CCGA manages a dedicated database that retains information on member qualifications and continued proficiency recertification or endorsements. The bulk of training activities to be managed are On-the-Water exercises and First Aid training.

The Database of training undertaken by members is refreshed every year on a zero based approach, i.e. each member has to confirm his training profile and relevant training taken in the past year (whether internal or external to the CCGA).

## 4.1.4 Training Standard 2001

The CCGA-Newfoundland & Labrador are not generally providing any theory training at any level.

The vast majority of membership is composed of professional mariners operating fishing vessels and who are duly certified to do so, according to the rules and regulations pertaining to their vessel

As reported by the CCGA-NL :

"In reference to National Training Standards Competencies listed for CCGA members are deemed to be covered during the owner/operator's Transport Canada STCW-95 training.

In reference to SAR Administration, all items listed in the National Standard are covered by the CCG Training Officer at initial briefing and any pertinent publications are forwarded (to the member).

In reference to SAR Readiness, items listed in the NTS2001 are deemed part of SCTW-95 training standards. Items listed are deemed covered under Marine Emergency Duties (MED) training, which is a requirement for the region's vessel owners/operators.

In reference to Search Operations/Techniques/Plans, these items are deemed sufficiently covered in the Regional Operational Guidelines and are discussed with the member upon enrolling in the organization. Helo Operations are covered by both the CCG Training Officer and the CCGA Operations/Training Officer – and are deemed part of the marine advanced first aid training provided. Rescue Planning, recovery, and re-boarding – are deemed covered sufficiently during MED training.

CCGA Newfoundland & Labrador stated that members attend training on a continuous basis to maintain certification and this information is captured in the annual update of the database.

On an ongoing basis, CCGA (NL) Inc. members participate in numerous exercises in conjunction with DND – 103 Search and Rescue Squadron, Gander, and the CCG (NL) Region. Before all these exercises members are briefed again on helo operations, search operations, and communications. Packages are provided to members containing this information.

With regards to maneuvering and recovery, members are vessel owners and CCGA believes they know the limitations of their vessels as they operate them on professional basis."

The National Training Standard state (page 9) that "...nationally agreed qualifications for CCGA personnel are the key to the establishment of common training standards...Similar qualifications and/or experience may be taken into consideration when accessing the requirements for all roles of the CCGA".

Hence CCGA-Newfoundland and Labrador considers that its membership meets and exceeds all requirements due to the qualifications and experience of their members.

#### 4.1.5 Issues and Observations

The extensive use of equivalencies and CCG evaluation may meet the letter of the NTS 2001, but it may challenge somewhat the original expectation that some form of SAR specific training, in addition to on-the-water exercises, would take place.

The nature of the CCGA-Newfoundland and Labrador membership and the approach used to "qualify" those members are an example of the assymetrical nature of the Canadian Coast Guard Auxiliary. This characteristic presents a challenge when trying to define and implement a National Standard under its normal definition.

## 4.2 Maritimes

The <u>CCGA-Maritimes</u> region has a mixed membership, with 80% in the Fishing community, and the rest being owner-operators of pleasure crafts (itself counting a high proportion of ex Fishers). This ratio and the overall membership are more or less stable from year to year. There exist no major trends in the development of community based, dedicated SAR units within the CCGA-Maritime organization. Very few of the "crew members" on fishing vessels are actually members of the CCGA as they are often transient and seasonal in status. It is the responsibility of the CCGA member owner/operator to have onboard crewmembers that are competent in helping on a tasking mission.

With a relatively low turn over rate, the emphasis of activities is on retraining (e.g. First Aid) and operational proficiency through on-the-water exercises. Refresher training will take place when regulatory requirements or arising information need to be conveyed to members. The newsletter (print) is the favoured means to disseminate information.

Members are usually keen on training but not on meetings. The CCGA will often use a training event as an opportunity to add on a meeting to deal with various operational issues within the CCGA.

Although CCGA-Maritime has a website, it is used strictly for the communication of administrative information. The region newsletter is in printed format and distributed to members by mail, with pdf copies archived on the website for the period 2001-2005. Major issues or learnings taking place in a given year would be found in the newsletter. E-mail dissemination would normally target only zone directors.

#### 4.2.1 Statistics

The total value of the 438 vessels in CCGA Maritimes is \$62,445,300. CCGA Maritimes has 1 CCGA owned vessel valued at 20,000. Five community based vessels exist in the region.

In 2006, Auxiliary members conducted 79 Pleasure Craft Courtesy Checks and 28 CCGA vessels took part in 15 training exercises. CCGA Maritimes was tasked 218 times to 205 SAR cases. CCGA Maritimes has 3 full time employees.

The region has had issues with members not attending training as some sessions or exercises are mandatory and others are optional. The region intends to make those sessions more mandatory in the future or find alternatives to entice more participation.

The CCG will hold around 15 controlled exercises annually, and the CCGA will encourage participation and remind members to attend at least one exercise per year.

#### **Trends in MARITIMES:**

YEAR	MEMBERS	VESSELS	TASKINGS
2000	774	590	195
2001	741	451	160
2002	750	433	163
2003	728	444	241
2004	745	445	214
2005	725	451	210
2006	741	438	218

#### 4.2.2 Training Activities

The training modules in existence within CCGA-Maritime date to a period prior to the NTS2001. When the latter was promulgated in 2001, the regional CCG-CCGA staff reviewed the existing content of their material to capture NTS objectives and adjust their delivery. This material is updated with the assistance of the CCG on an ongoing basis as the need is identified, mostly with changes in policies or regulations affecting CCGA members. CCGA-M also borrowed some reference material from the CCGA Central &Arctic program. The region has an equivalency chart that lists credits/endorsements against the CCGA-Maritime training modules. These credits stem from training or certification acquired outside the CCGA.

The region does not see any need to increase the level of the standards at this point and CCG has not identified issues related to the competency of Auxiliaries in that region.

CCGA-Maritime have approximately 10 active trainers who were given a CCG seminar on teaching techniques and on the job training in delivering sessions with CCG staff or other experienced CCGA trainers. CCGA trainers have to cover 16 zones within CCGA-Maritime. This on the job training process culminates in a proficiency validation through observation of a training session delivered by the candidate instructor. Most of the training is done by internal CCGA trainers, unless the Canadian Coast Guard requests to be actively involved in a given session. Training in CCGA-Maritime uses an opportunity based approach that may or may not capture all of the intended population due to seasonality of work, etc.... hence a resulting variance in the achievement of training targets across regional zones.

The CCG regroup trainers once a year on average to do a refresher. CCG will also do some spot checks on CCGA delivered training for quality assurance.

## 4.2.3 Training management

The region maintains a basic database to track information on training undertaken by each member. The database records only the last training performed and is updated weekly with the CCG. Reports are printed and sent to Zone directors once/twice a year for their assessment and prioritization of training needs. The Second Vice-President of CCGA-Maritime heads a training committee that addresses arising issues and needs, and recommends action plans.

The system is centralized with paper transactions and reports between CCGA and its zone representatives.

## 4.2.4 Training Standard 2001

CCGA-Maritime has several modular courses covering most subjects, or variations thereof, listed in the operational SAR stream of the NTS2001. Classroom sessions are delivered in Powerpoint/overhead presentations, with copies of the appropriate sections of the CCG SAR Reference Manual extracted to form the student manual.

One module is a self study questionnaire to accompany a 1-5 day visit at a CCG lifeboat station. Other modules are outsourced (St John's First Aid or Radio Operator Certificate).

Operational Competency Evaluation will take place during on-the- water exercises, to which the participant may or may not attend for quite some time due to scheduling cycles in the region.

## 4.2.5 Issues and Observations

CCGA-Maritime has an inventory of Powerpoint and video assisted presentations for every module.

Instructors follow a standard lesson plan with their own material.

Student manuals are printed and will include the hand out of the presentation along with photocopies of sections of the SAR Reference Manual.

The style of presentation used is likely the most effective for the typical audience found in the Region. The general environment may lead to a certain degree of inconsistency in instructional methodology, content delivery and participant evaluation. However, the content of the curriculum covers most of the competencies found in the national standards.

It is however difficult to assess the degree or level of competency achieved through this method of delivery.

## 4.3 Quebec

The majority of CCGA-Quebec members are either pleasure craft owners or linked to community based vessels, and approximately 10% are commercial fishers. Quebec community-based units are created around vessels that are owned by the CCGA, but loaned to the communities that are then responsible to get volunteers and fund vessel maintenance. Communities do not generally get funds to buy or build dedicated SAR craft, as it is the case in CCGA- Pacific.

The CCGA-Quebec has undertaken several initiatives in the past 2 years to restructure its training management and delivery framework, in response to both an increasingly limited capacity/availability of regional CCG resources to assist, and to meet the National Training Standard (2001).

Quebec CCG has been actively and directly involved in training CCGA members in the past, and assisted CCGA in early 2006 to roll out a new training curriculum framework that complies with most operational competency requirements already listed in the National Standard 2001.

CCGA-Quebec is in the process of implementing a trainer recruitment program, so to ramp up its internal capacity to deliver standardized and consistent training in its various zones. Direction was taken to consolidate and improve the planning function and the delivery of standardized material through various internal trainers - with the objective to achieve more consistent outcomes between zones.

The region organizes on-the-water exercises in each zone. These exercises are more akin to a test/evaluation environment then a training session. Crews are expected to apply previous learnings. There is debriefing at the end of the exercise but the outcomes are not systematically shared with other units.

The CCG SAR Training Officer conveyed that he had just returned from a RHIOT course in Pacific region where he was introduced to the various initiatives of the CCGA-Pacific, which stimulated some thoughts on possible initiatives for CCGA-Quebec. This is an example of the latent potential in promoting horizontal sharing of best practices between CCGA trainers and their CCG counterparts across regions.

## 4.3.1 Statistics

#### **CCGA QUEBEC**

The average value of the 152 vessels in CCGA Quebec is \$111,557. A certain number (18 out of 152) are all weather lifeboats (ALBs) owned by CCGA but loaned to units who must maintain them. Most units have a combination of privately owned vessels and CCGA ALBs.

CCGA Quebec has 669 members in 55 units. 5 community owned vessels and 17 CCGA owned vessels.

In 2006 CCGA Quebec members conducted 652 Pleasure Craft Courtesy Checks and 73 CCGA vessels took part in 70 training exercises.

CCGA Quebec was tasked 367 times to 227 SAR cases for a total of 1356 hours. As much as 50% of taskings are performed by a few ALBs in 2 zones.

CCGA Quebec has 3 full time employees.

YEAR	MEMBER S	VESSELS	TASKING S
1979	60	90	0
1982	225	110	115
1987	495	184	271
1991	586	203	345
1992	356	129	346
1997	587	149	303
2003	706	151	440
2004	665	169	400
2005	654	150	397
2006	665	152	367

Approximately 20% of the region's budget was allocated to training in 07/08

## 4.3.2 Training Activities

The training audience is largely composed of fishing vessel owner operators in the Lower St-Lawrence River and the North shore. The Gaspe peninsula sees a mix and the upper river and especially the Quebec to Montreal area counts the largest proportion of pleasure craft operators. Some units are loaned by CCGA- Quebec to community groups that operate them and take charge of maintenance.

The policy objective within CCGA-Quebec is for each member to receive 2 mandatory SAR training sessions per year (one On-the-Water Exercise and one theory course). With 55 units, this represents 110 training sessions per year plus First Aid Training and recertification.

The new training curriculum is structured in a modular approach (23 modules so far) combining practical and theoretical courses within a progressive path of competency as Rescuer levels 1, 2 or 3 (see figure below).

The region is currently going through a transition and is recruiting more trainers/evaluators to supplement CCG Training Officer' services who, as in other regions, are now less available to the CCGA due to other CCG commitments. At the

initial phase of this transition, the Rescue Requalification, First Aid training, and victim transportation training would be delivered by CCGA internal trainers.

Equivalency credits/endorsements are assessed for those members with prior experience and/or who followed the older training format within that region. There are plans to process all members through the new curriculum in the coming years, especially as internal training capacity increases.

There is presently no coxswain level training module in this region. Membership applicants who own their vessel must have in their possession the required certification to operate their vessels under existing rules and regulations. Membership applicants who wish to be operators of community based vessels must satisfy the regulatory requirement to operate that vessel. All membership applicants would normally satisfy the entry level requirements of the NTS2001 and will undertake the new Rescuer 1, 2, 3 Program.

The old training framework had not been designed around a "learning path", as training topics were self contained and without pre-requisites. However the establishment of the Rescuer level 1, 2 and 3 program will de facto establish some pre-requisites (by grouping courses to be taken for each Rescuer level).

The requirement for RHIOT training to operate the All-weather Lifeboats (ALB's) is presently under discussion. In the mean time the CCG Training Officer is structuring a compact Basic Small Craft Operation course that would be a prerequisite for RHIOT- level training if/when the scheme comes into effect. The Basic Small Craft Operation course is based on existing course standards but customized for compact delivery over an extended long week-end.

The region now uses the new SAR Manual (from CCGA-Pacific) as a reference and teaching tool. Although there is a broad curriculum, several CCGA trainers were still designing their own lesson plan which led to unreliable or inconsistent training outcomes. The situation is now being corrected and CCGA trainers will be asked to follow the master lesson plans being implemented.

The region is also investing in training equipment to support the delivery of training in remote zones.

Formation GCAC- Sauveteurs 1,2,3	crédits	info		
Sauveteur 1				
Carte d'opérateur d'embarcation	1	prérequis de la GCAC		
Certificat VHF	3	prérequis de la GCAC		
Cours de base en premiers soins et RCR *	14	prérequis de la GCAC		
Modalité d'intervention	3	inclus MRSC, SCTM et rapport de cas		pport de cas
Équipement sauvetage et immersion en eau froide	3	théorie 1.5h et exercice en piscine 1.5h		

Vérifications d'avant départ et urgence à bord	3	MOB, voie d'eau et chavirement		navirement
Matelotage	3	avec cordages et accastillage		castillage
Total	30			
Sauveteur 2				
Exercices recherche et sauvetage sur carte	3	ETA, c	ourant, distance,	position etc
Technique de recherche et repérage	3	théorie		
Technique de remorquage + pratique	3	pré req	uis: matelotage	1.5T et 1.5 P
Feux, extincteurs et pièces pyrotechniques	3	2h00 thé	orie et 1h00 prat	ique extérieur
Transport de victimes	3	inclus récup. pré requis: premier soins		premier soins
Sauvetage de jour	3			
Stress post traumatique, règlement de conflits	3			
Règlement sur les abordages	3	lumièr	e, signaux sonor	es et formes
Exercice de recherche de jour	3			
Exercice de recherche de nuit	3			
Total	30			
Sauveteur 3				
Perfectionnement en mission SAR	10	prérequis: niveau 2, incl. manœuvres SA		nanœuvres SAR
Notions de coordonnateur sur les lieux	3	inc. journal de bord, gestion d'équipe		tion d'équipe
GPS lors de missions SAR	3	technique et système global		global

Météo en contexte SAR	3			
Exorcico SAD	3			
Exercice SAK	5			
Exercice SAR	3			
	-			
Perfectionnement en premiers soins	Perfectionnement en premiers soins 5		et pratique	
Total	20			
Total	50			
* requalification obligatoire aux 3 ans				
I a compilation se fera en inscrivant la da	ite où le ci	ours à été suivi d	lans la colonne d	les crédits
La compriation se fera en inserivant la da				

Recuer Program level 1, 2 and 3

## 4.3.3 Training management

The training database (spreadsheet format) has been so far managed by the CCG SAR Training Officer, given the latter's high level of involvement in CCGA-Quebec training in past years. However the CCGA-Quebec Board of Directors is committed to adopting the new SAR Management System (SMS) from Pacific Region as their operational management system, which will also address efficiently all future training management and planning needs.

The present planning system rolls up unit and zonal training plans to be consolidated at the regional level into an annual training plan. However, the region recently published new guidelines to help members better understand their roles and obligations with the requirement for training, and to list selection criteria and functions of the various incumbents in the training process, from coordination to delivery to evaluation. The concise guide includes the elements of the 3 phases of training for the new Rescuer 1, 2 and 3 levels, training application form and the yearly calendar of the training plan cycle.

CCG and CCGA are elaborating written tests as they did not exist before. This will meet the NTS2001 criterion of having an adequate evaluation measure for its internally delivered courses.

## 4.3.4 Training Standard 2001

CCGA-Quebec has begun ramping up to the NTS2001 in January 2006 with the consolidation of previous training into a new modular curriculum. The Rescuer 1, 2 and 3 curriculum captures all the elements of SAR operations. Entry level certification criteria address the qualification that coxswains or owner-operators must

meet prior to operating their vessel. The information system infrastructure is being planned for implementation in the near future. This will offer better planning and tracking tools. The recruitment and training of instructors and evaluators will increase the internal delivery capacity and the clearer roles established under the new training policy should improve planning processes.

The new training policy clarifies the obligation of members to attend training activities, an obligation that was not clearly understood in some areas.

Similar to other regions, the Administrative stream has its roles described without any specific competency standard.

Training Logs are not in used in the region, as the central database is the main tool to track training requirements and member profiles.

#### 4.3.5 Issues and Observations

The region would welcome some national standards on competency levels for Fast Rescue Craft (FRC) operators, as the region has a number of craft in that category. A concern exists however in that should RHIOT training become the standard, access to training seats at the regional CCG training center may be limited.

Although CCGA-Quebec only implemented the new curriculum in January 2006, there is focus and energy to align the various elements of the Training Standard. A new policy on Training, the near term implementation of the SAR Management System and the further structuring of master lesson plans and evaluation standards will make CCGA-Quebec meet the objectives of the NTS2001 in the not too distant future.

The region is carefully managing its transition to a more structured training environment, and limits the number of initiatives to maintain integrity of its training system and manage its available key training delivery resources.

The region does not operate a website to this day. It would likely benefit from implementing a training delivery and knowledge sharing strategy using technology. The design of a corporation website is in the plans, subject to finding a volunteer member to manage that initiative.

There seems to be some difficulties in ensuring proper business continuity with respect to turn over of regional or zone administrators and coordinators. For instance a zone training coordinator did not know a training plan had to be produced by a certain date for regional roll up and consolidation). This could be alleviated with centralize knowledge center with job descriptions, job aids and procedural guidance. It was also highlighted that some reference material available to other regions were not part of the inventory in Quebec when new incumbents took positions. The comment was directed at the lack of inventory control or lack of knowledge of the existence of these documents. Again, a central knowledge center, whether regional or national, would alleviate such short falls.

The region plans to implement a badge and pin system to recognize achievements in training levels and further instill pride in the wear of the uniform. This is partly in response to historical trends whereby members in some areas are less keen to attend

training sessions, or are not aware of the steps and modules they need to attend in order to advance their training.

Turn over in CCGA-Quebec is cyclical, as recruitment is local and once in a while a fair number of the new recruits are found to be lacking in motivation (i.e. they joined just for the name, not for the dedication) and so are let go.

## 4.4 Central and Arctic

The membership of <u>Central and Arctic</u> region offers a variety of cultural and marine background, blending fishers, pleasure craft operators, owner-operators and community based volunteers. Its Districts span an expansive geography extending from urban Southern Ontario westward to Alberta and northward to both Arctic Territories.



Its Districts count privately owned and operated craft (pleasure or fishing vessels) and Auxiliary-owned, community-operated vessels. Some communities share costs with the CCGA in the acquisition of their unit. Some operate Fast Rescue Craft (especially in the North) and others inherit surplus assets transferred from other organizations. With an aging (and previously predominent) population of pleasure craft owner-operators expected to retire from active membership or become less available for tasking, the corporation expects to see a continuing trend in the expansion of CCGA-owned, community-operated units.

The CCGA-Central & Arctic has evolved its training program over time along two streams, the SAR Crew and the Boating Safety Specialist (the latter now being under Transport Canada oversight). The SAR Crew training program has no provision for specialized coxswain training at the moment. Owner/operators are screened for required regulatory qualifications upon acceptance as a member into the CCGA, then provided with CCGA training related to SAR operation and administration. Where vessels are owned by CCGA and crewed by community volunteers, a local selection committee screens candidate operators for regulatory compliance and experience to operate the unit.

Meanwhile, trends in regional demographics and recruitment are such that more new members are non-owners, may lack basic seamanship knowledge, or otherwise can't meet the entry level competency or qualification under existing CCGA standards. Hence demand has increased to provide training where training was not needed in the past, and to give emphasis on practical training and on-site/on-the-water exercises and evaluation.

An additional pressure point to the regional long term outlook in membership recruitment and training delivery is the foreseen increase in socio-economic activity in the North. Whether it is fueled by private sector investment in various industries, or by other federal program service delivery requirements, the CCGA-Central & Arctic may be called upon to play a larger role in the North and recruit membership from a target population that may not meet the customary profile of an applicant.

A regional training committee reviewed region-wide issues within the existing standards, and is implementing incremental but strategic changes to the program in the context of the above trends, capacity and resource limitations that vary between districts. Some initiatives are under way and others are being planned.

### 4.4.1 Statistics

The Central and Arctic Region counts approximately 800 members and covers 4 Provinces and 2 Territories. It has 71% of Canada's coastline and includes Great Slave Lake, Mackenzie River, Lake Winnipeg and the Great Lakes. More than 1.2 million boats are registered or licensed in Ontario alone, of which 780,000 are on the Great Lakes.

The region has a vast geography with a variety of cultures, jurisdictions, geography and boating interests. This broad geography can impede the timely roll out of CCGA plans.

In 2006, the Auxiliary was tasked 188 times to 181 SAR cases, and 22 vessels participated in 19 training exercises.

The 99 or so vessels in CCGA fleet have an average value of \$78,428 each. CCGA Central & Arctic have 18 CCGA-owned and community based/supported vessels.

CCGA Central & Arctic has 2 full time employees. The region spent more than 35% of its annual contribution on training related activities in fiscal year 07/08.

#### Trends in C&A:

YEAR	MEMBERS	VESSELS	TASKINGS
2000	902	123	253
2001	936	124	282
2002	1200	115	240
2003	946	125	242
2004	932	135	242
2005	839	123	110
2006	775	99	188

### 4.4.2 Training Activities

The revised Training Program (2005) is the latest version available. Although not yet formerly revised, ongoing initiatives adding emphasis to practical on-the-water training and new member training may soon lead to formal amendments to the program content.

Features:

There are two types of entry level members under the present program:

(a) member + own vessel (unit): the owner or his/her designate must meet the regulatory requirements to operate the vessel. After joining the CCGA, the member must complete the SAR Crew training program.

(b) member w/out vessel: the member must complete the SAR Crew training program.

Communities operating a CCGA owned vessel will normally use a selection committee to screen and appoint a qualified coxswain. The Coxswain will then undertake the SAR Crew training program, if not previously attended.

The present requirements for SAR Crew status are the possession of a Marine Radio Operator Certificate (ROC-M) and of a Pleasure Craft Operator Certificate (PCOC) (or higher certificate if the vessel's regulatory status requires it). The SAR Crew program consists of:

SAR Training Course (<1yr from entry and recertification every 5 years) - 2 day classroom

Joint On-the-Water exercise (SAREX) (once every 5 years)

SAR Ops Evaluation (cyclical for existing crew and compulsory for new crew members and new units): the evaluation can be done during SAREX or during Operational Training, is performed by an approved assessor/evaluator (now often a trained instructor) using a Competency Checklist

Operational Training Course (new members) - one day classroom followed by on-the-water activities to apply classroom learning. This course will be a requirement for new members before they can be tasked on missions.

Marine First Aid (St-John's)

There is no seamanship course (a seamanship checklist exists) but the CCGA- Pacific SAR Crew manual and the CCG SAR Reference Manual are available to all).

The region is planning the introduction of a "New Members Handbook" and Operational Competency Certification to establish a pool of competent new leaders, instructors and evaluators of the future.

Instructors are qualified after taking a 2.5 day SAR Training Instructors course delivered by the CCG. All SAR Ops Evaluators/ Assessors are pre-approved by the Training Director and follow a guideline/checklist of operational competencies.

Present trend is that members will acquire both the instructor and evaluator competencies and increase tasking efficiencies in the process.

To offset shortfalls in operational SAR competency with new members, the region emphasizes the training of evaluators and competency assessors for On-the-Water Training.

The region will also explore the possibility of increasing water patrols to serve as hands on operational training in communication, navigation and vessel operation. In addition, the regional SAR competition will have a greater training focus and cover all competencies in On-the-water operation, from navigation to night operation to SAR skills.

The region is planning the development of online training in modular format to cope with the realities of the district and the opportunities offered by a new category of membership.

## 4.4.3 Training management

The region is in the midst of a 5 year planning cycle for training. The plan includes adjusting the requirements of the National Training Standard to the varying nature of its regional requirements. All district training officers were trained last year.

The Board has a Standing Committee on training which provides oversight on planning, effort allocation and recruitment of new trainers. Northern areas of the region continue to develop and units continue to draw on other district instructors for the time being to support training activities while internal capacity builds up.

Management does not use the Training Log, which is used inconsistently across districts. The central database is the point of reference - but still lacks reliability due to inconsistent input from the field. The SAR Management System will be rolled out in 2008 with 2 districts in pilot. Local implementation will remain optional but it is considered that once the benefits are clearly seen, there will be total buy-in.

## 4.4.4 Training Standard 2001

Most of the SAR related training content is compatible with the requirements of the NTS2001. Also the region includes practical training in its curriculum - in fact increasing its emphasis under the new Operational Competency training approach where assessors/evaluators will verify crew member and operator competency during on-the-water exercises.

New crew members will have to be evaluated in operational competency before being authorized to go on full mission with their unit.

The region uses the RHIOT training to train operators of Fast Rescue Craft. The RHIOT course is a pre-requisite to operating the craft, but access to training is limited due to the demand for that training by CCG personnel and/or their other partner agencies. The CCGA will however take a unit out of service if an operator does not meet the RHIOT training requirement and access to training is unavailable.

CCGA-Central & Arctic will require deviations from the NTS2001 for its Northern regions, where membership will be drawn from a population whose learning style and

entry level competencies will often differ from those in the south. The adaptation of training approaches for this purpose should not present serious difficulties given that the Operational Competency training is likely a favoured method.

## 4.4.5 Issues and Observations

Favouring on-the-water exercises and operational competency assessments is the correct approach for CCGA-Central & Arctic. It offers the best common denominator in training new members with less or no marine experience, northerners with non traditional entry competencies, and community based volunteers. It offers a standard that spans multiple training audiences.

This new direction increases demand for on-site assessments by trained assessors and evaluators. The build up of internal training delivery and evaluator capacity aims to deal with this new environment and to bring unit crews to standard through an operational, hands-on approach. The piloting of a small craft operation course also aims to address the lack or insufficient prior handling experience by new members.

The Northern strategy envisaged by the region will require flexibility in the application of the NTS2001, given the cultural differences, local habits and the core strength of local knowledge

The CCGA-Central and Arctic <u>web site</u> appears rudimentary at first glance, yet offers important communication features from a training/learning standpoint. The site's member-only area lists all required documents and policies, manuals, minutes, and other pertinent operational forms and guidelines. The site also offers an online forum for exchange between members. The new SAR Management System will be integrated to the Web site, and the Training Committee is considering the development of online training to provide further flexibility in the delivery of the theory portion of the training program. With this tool, the approach and the elements already in place, the website may become a solid foundation for future training and knowledge sharing initiatives.

The possible conversion of some training to an online format would provide an opportunity to review the content of existing student manuals and improve their structure/format along recognized approaches to training material design.

## 4.5 Pacific



The <u>CCGA-Pacific</u> has over the past decade seen a radical change in the composition of its membership and the distribution, type and crewing of its assets. CCGA-Pacific reported that as of 2006, only 10% of the its volunteers came from a maritime background, with the vast majority of its vessel assets not being owner-operated, but rather owned by local societies and crewed by community based volunteers. This evolution in the composition of its membership required the region to invest rapidly in a complete curriculum development to meet the skills and knowledge development needs of a new type of entry level member.

The region is also distinct amongst the Auxiliaries in its capacity to raise funds from external donations. This external fundraising grew exponentially in the 2005-06 period as CCGA-Pacific corporation and several of its member societies were able to separately access grants from the British Columbia Gaming Corporation, and invest this funding in the renewal of its asset base. A direct consequence of this substantial capital injection was an increased response capability of these assets, along with a growing concern by the CCG of the corresponding increase required in operator competency. Hence a request was made by the Canadian Coast Guard - Pacific Region to CCGA-Pacific, to establish mutually acceptable crew competency standards for the various classes of assets now in place, to train crew to those standards, and to establish a safety management system that assures crew integrity, reliability and safety when the unit is tasked on a mission.

Training is the focus of many recent and ongoing initiatives at CCGA-Pacific. The region is equipped with an energetic and engaged segment of the membership that is technologically savvy and ambitious. A strong curriculum development support existed

through the direct involvement of the CCG SAR Training Officer (who recently left the CCG) and the borrowed/hired expertise of external training design specialists. Also, website hosting and management services, as well as the design of the newly adopted SAR Management System application, were provided by a member of the corporation via the facilities of his company, but free of charge to the CCGA- Pacific in a development and licensing agreement.

As a result from the above conditions, CCGA-Pacific is engaged on a training path that exceeds the assumptions and expectations underlying the National Training Standard 2001. This path can be explained by historical roots, increased asset capability, external fund raising successes, and the aspirations of a number of CCGA-Pacific members and leaders.

It has yet to be determined to which extent these initiatives and directions can or should answer the future needs of other CCGAs.

#### 4.5.1 Statistics

The 2006 statistics for CCGA-Pacific are as follows:

The region numbers 67 vessels, 45 of which are community based/supported.

48 CCGA vessels participated in 1227 training exercises. Units were tasked 852 times to 752 SAR cases and volunteers spent a total of 573 hours co-crewing onboard CCG vessels. \*

CCGA-Pacific has 5 full time employees. Approximately 30% of the annual contribution was allocated to training in 2007/08 FY. The corporation may use external fund raising receipts to supplement its training investments.

\* Co-Crewing is a unique feature of CCGA-Pacific, where some CCG SAR stations can be supplemented with the presence of CCGA crew. Some CCG personnel are also members of the CCGA and will act as CCGA crew while off-duty from the CCG.

YEAR	MEMBERS	VESSELS	TASKINGS
2000	1326	265	708
2001	1389	203	908
2002	1294	134	987
2003	1319	99	911
2004	1393	111	835
2005	1328	97	807
2006	1158	67	852

## 4.5.2 Training Activities

The <u>CCGA-Pacific Training</u> approach is both systemic and systematic. Its <u>framework</u> is well laid out, with clear paths of progression and streams of specialization. Some initiatives are planned to be completed in 2008.

The elements of the training program outlined in the <u>Training Approach</u> are consistent with recognized methods and principles guiding the development of sound training systems. These elements, approaches and initiatives are, for the most part, in place at varying degrees of operational efficacy or efficiency. The Regional Web site has become a backbone for the efficient dissemination of information, the acquisition of training material and the recording of operational and training activities. It even has an inventory of quiz <u>questions</u> that members can review.

CCGA-Pacific has developed specific Regional Training <u>Standards</u> to guide members in their learning plan as well as trainers in the design and delivery of training programs. It has also designed a <u>Training Log Book</u> that acts both as a training registry, learning plan and performance development guide for the member. All <u>training manuals</u> are archived for easy retrieval in the training section of the regional website. The <u>SAR Crew Manual</u> is now used across all regions since 2007, individual sections of which are also archived on the website for easy retrieval.

CCGA-Pacific runs a station trainers course to develop unit-based instructors. Station trainers learn about competency based training, methods of delivery, and learning styles. The course combines classroom lectures and on-the-water exercises, as well as teaching aids retrievable from the CCGA-Pacific web site.

Specific components of the training systems are outlined in the following sections.

#### 4.5.2.1 Streams and Learning Path

The CCGA-Pacific training structure has modular elements meeting the objectives of NTS2001, and includes several functional streams and learning methods. Its visual representation displays the learning continuum and expected paths members have to take in order to reach higher levels of competency in a functional stream.



Training Structure p1/2

raining Streams	Training Components	carried and the second se
SAR Crew Individuals wishing to be active Search and Stream Rescue Crew members follow the 'SAR Crew Stream' and progress at their own pace.	New Member Orientation - Claseroom A ~2 hour initial member orientation, including take-home reading and assignments.	Workbook Tutorials & Exercises Quizas Quizas Ouizas
afe Boating Individuals wishing assist in promoting safe Stream boating follow this stream. Members may elect to complete both the SAR Crew and Safe Boating streams.	New Member Orientation - On-Water Asic vessel orientation. Including basic vessel theory and emergency procedures.	Skills & Krownedge Reviews           NETsim         Key Tools of the SLS: The Navigation Equipment Training Simulator (NETsim) is the primary tool used in the SLS It is a virtual simulator that has standard mains navigational equipment tused on most has standard mains navigational equipment tused on most
Advanced Graw Advanced Graw Advanc	Unit Training The majority of training is conducted at the unit level by Conswains, Training Officers, and ARTE team members.	Reference Library rescue cart. The SLS Workbook includes recommended reading from the Nautical library relating to each exercise. Each Workbook exercise is structured to cover the key skills and their associated knowledge.
Standard         own standard and all are available on the ccga-p web site in detail. A summary of the standards is printed in the log book.	Development training approach is for members at all levels to maintain their competency at all levels.	Training Courses An internal CCGA-P 2 day course taught in conjunction with
CGA-P Certifications As members progress through the CGA-P training system they achieve various certifications PCOC Instructor Courtey Check (PCC) Instructor	Evaluation Smulti-faceted and conducted by different people and through various means. It includes practical skills demonstrations, oral and written exams, pre-set scenarios, and simulation.	CCG RHIOT     A Canadian Coast Guard boat handling 8 day course taught     in Bamfield BC - Combining SAR and Heavy Weather boat     handling skills with concepts of positive control and safety     for small fast rescue craft.
Vew Crew Crew Crew Crew Certification Advanced Crew Maintain the Crew Certification.	External Certifications PCCO The Pleasure Craft Operator Competency - a Transport Canada Requirement. BOC-M Restricted Operator Certificate -	SAReim Course FRCain FRCain Com <sup>ming</sup> <sup>In</sup> 200 <sup>B</sup> Com <sup>ming</sup> <sup>In</sup> 200 <sup>B</sup> An internal CCGA-P 5 day course taught at several levels that uses a combination of dasmon, on-water, and time in the FRCsim - a revolutionary small vessel simulator designed specifically by the CCGA-P to teach challenging navigation and traffic scenarios to rescue crews.
Certification Coxavain Certification Certification Certification Certification Certification Certification Certification Certification System) and a certificate is	Maritime (VHF Radio License) - issued by Industry Canada	Unit Trainer An optional 3 day course for members that intend to deliver training at the Unit Level. Aimed at Training Officers and Coxswains looking for additional instruction in how best to offer training to others.
Unit Trainer provided as each level 5 attained. Advanced Rescue Trainer Evaluator	with periodic recertification	PCCC Instructor A single day workshop presented jointly by Transport Canada and the CCGA-P to assist experienced PCCC Checkers in becoming PCCC Instructors and enabling them to offer the PCCC Course to other members.

Training Structure p2/2

#### 4.5.2.2 ARTE

CCGA-Pacific implemented in 2005/06 the concept of the Advanced Rescue Trainer Evaluator (ARTE). Trained under the guidance of the CCG SAR Training Officer, the 20 members of this team form a mobile training and evaluation unit that can be deployed throughout the region. Their role is to:

- influence or enhance skills and practices throughout CCGA-Pacific
- evaluate the higher skill/knowledge sets of the various CCGA-Pacific marine rescue training programs
- assist all units within the CCGA-Pacific in order to perform training assessment analysis, provide essential individual/crew training and assist in the development of overall unit training.

CCGA-Pacific hopes to almost double membership in the ARTE team. Aside from providing instruction and evaluation of crew competencies, they are to carry equipment and maintenance inpection at stations. In the near term, many will be involved in completing the curriculum and delivering FRC Simulator courses to meet new crewing standards established by CCGA-Pacific in January 2008.

The ARTE team continues to deliver the "station trainer" course, which aims to expand the number of local trainers at various units and stations in CCGA-Pacific. Candidates are trained to acquire competency- based instructional skills and techniques, including the conduct of local hands-on exercises.



ARTE Web Page

The stated objective for ARTE members is to "raise overall measurable training standard of all units and members" and develop more accountability at the local and regional levels. The team is fully functional at the moment - adjusting the delivery of its services according to regional needs and as experience is gained and feedback is received on the interventions that are provided.

The ARTE team developed the Advanced Crew Standard and Coxswain Standard with the support of the CCG SAR Training Officer. The CCGA envisions the ARTE as the cornerstone for self-sufficiency in meeting future training needs within CCGA-Pacific, under the overall guidance and monitoring of the CCG.

The existence of an ARTE group and the multiplication of local trainers through the station trainer program should, ideally, have a cascading effect and create a continuous learning environment throughout all units. The style of interventions and personalities of ARTE members will be a key success factor in making this continuous learning a long term success.

#### 4.5.2.3 Simulation

CCGA-Pacific has initiated 2 projects to introduce <u>simulated environments</u> as part of the region's strategy in technology- assisted learning and to add consistency in training outcomes.

The **NetSim** courseware is an online interactive navigation simulation tool referencing the CCGA-Pacific SAR Crew Training Manual. It allows the user to learn basic navigation along with Radar and GPS familiarization. It could (and should) be complemented with onsite instruction or visits of ARTE members. With a primary audience at the crew member level, completion of this online course will become a pre-requisite to attend the Full Mission Simulator when the latter's planned 4-day curriculum is fully developed. The NetSim courseware was in its final development phase at the time of this review.

The **Full Mission Simulator** (FRCSim) is a small vessel simulator, complete with cabin enclosure, instruments, audio and a virtual external environment. An instructor station lies outside the cabin. The instructor can communicate with the cabin crew, intervene in the exercise scenario, and monitor student performance and behaviour.

A visit of the simulator found the prototype to be well conceived and, pending the design of the 4-day training curriculum, could certainly be an important tool to supplement the RHIOT course in the training and re- certification of coxswains within CCGA-Pacific. Given the simulator's present location at the CCG base Victoria, it is foreseen that the curriculum will combine simulated and on-the- water exercises within the 4- day session. At the time of this review, the curriculum design was in its preliminary phase. With CCGA- Pacific Crewing Standards announced in January 2008 and due to take effect in May 2008, the completion of this project becomes a priority (unless the region continues to process its members through SEN-L course providers). ARTE team members are being trained as simulator instructors to meet the expected volume of training. The first training

audience targeted will be existing coxswains requiring to meet the new Crewing Standards. Over the longer term, all regular coxswains (approximately 180 at this time) and advanced-crew level members aspiring to coxswain-level competency would be trained with this technology.

Below is an **excerpt of the official description** provided from the CCGA-Pacific project team.

#### CCGA-PACIFIC FAST RESCUE CRAFT SIMULATION PROGRAM

In 2005 the Canadian Coast Guard Auxiliary - Pacific (CCGA-P) and Canadian Coast Guard Pacific- SAR embarked on a project to develop a new training program for its rescue crews. The cornerstone of this new program would be the world's first accurate simulator for Fast Rescue Craft- the FRCSIM. The CCGA-P continues to develop this technology and accompanying training curriculum.

#### SIMULATOR PROGRAM BACKGROUND

The project goal is to create a rescue craft simulator that will fit into the operational SAR training program. Funded largely through the New SAR Initiatives Fund the project was initially proposed 2003. Since then hundreds of hours of volunteer time as well as corporate donations (including a complete vessel cabin fromTitan Boats) have kept the project going.

The primary training objectives of the simulated environment are:

To decrease the risk of a catastrophic accident onboard CCGA high speed rescue craft :

Using a web based radar and navigation simulator to develop the primary skills sets involved in operating electronic navigation equipment, passage planning and collision avoidance;

Employing a full mission simulator (FRCSIM) to deliver advanced crew navigational training, and evaluate and further refine positive vessel control by the whole crew in scenarios involving passage planning and collision avoidance

To improve the performance of CCGA search and rescue crew communications and resource management during the execution of missions:

Using a full mission simulator to augment on-the-water training with some higher risk and more complex SAR simulated scenarios.

Evaluating whole crew performance in the execution of large and small scale search operations in a full mission simulator

#### SAR LEARNING SYSTEM (SLS)

The 'SAR Learning System' (SLS) provides the ability for CCGA-Pacific members to gain marine navigation knowledge and to practice skills in a virtual environment. It is designed to complement on-the-water training, consistent with the CCGA-Pacific Crew,

Advanced Crew, and Coxswain training standards, and is a prerequisite for the full mission FRCSim course.



#### **NETsim**

The Navigation Equipment Training Simulator (NETsim) is the primary tool used in the SLS. It is an online virtual simulator that has standard marine navigational equipment used on most rescue craft. It is self-paced within a structured training environment. The online simulation training program addresses the challenges of distributing training to remote members on the BC coast.



#### **NETsim Overview**

The NETsim is a component tool in the SLS that help members to learn the effective use of onboard electronic navigation equipment. It combines modules for several different stand alone and multi- function units:

> Radar Chart Plotter GPS Depth Sounder

#### **Tutorials and Workbook Exercises**

The NETSIM learning program is a training aid for the basic understanding of electronic navigation and not an alternative for practical, on- the-water experience. Interactive video tutorials demonstrate and describe each NETsim component, introduce all controls and buttons, and show essential navigation and operational techniques. The Workbook combines some basic theory with exercises conducted on the NETsim to apply knowledge and practice navigation skills. At the end of each exercise, Skills and Knowledge Reviews reinforce key concepts from the previous section.

The SLS Workbook includes recommended reading from the Nautical Library relating to each exercise. Each Workbook exercise is structured to cover the key skills and their associated knowledge. Nautical LibraryThe Nautical Library includes readings from the CCGA-Pacific Search and Rescue Crew Manual, *The Radar Book* by Kevin Monahan, on-line video presentations and other nautical

references. These resources constitute the knowledge sections of the crew level standard and the background for the skills exercises in the Workbook.

#### **Evaluations**

The system includes Skills and Knowledge Reviews, a series of interactive selfchecks to ensure essential concepts are understood. Short quizzes are also inserted and review the skills and knowledge of navigation that will be required to pass the crew level navigation exam.

#### FRCSim

After completing the Crew level NETSim, course members will participate in an intense, 4 day training program using the FRCSim.



This immersive simulator includes: an accurate mathematical modeling of vessel motion and a mock-up of an actual FRC cabin, complete with real vessel controls and equipment for a truly realistic experience. Also, detailed graphical models of the vessel and target vessels operate in a representation of either the Victoria to Sidney, Douglas Channel or Broken Islands ocean environment that includes accurate depths, buoys, lights, and charted information. A 270° surround projection system displays the environment, and environmental parameters are controlled by the instructor. Completing the immersive experience is a 5 speaker sound system providing simulated engine and environmental noise

Members of the CCGA-Pacific Advanced Rescue Trainer Evaluator (ARTE) team are currently working to complete the training curriculum that will employ the simulator. This includes textual, web-based, and video components as well as a complete course on Advanced Navigation that will form a cornerstone element of the CCGA-Pacific <u>Advanced Crew</u> Standard. Using the advanced crew and coxswain standards as a backbone to the program development, the curriculum development team is incorporating subject matter from the SEN-L course to enhance training in electronic navigation. All FRCSim instructors are certified SEN-L through Camosun College.

The FRCSIM will be effective in the bringing together of many hours of crew and individual training to test complex skill interactions in the following areas:

Positive Vessel Control Crew Communications Conflict Management Coaching and Leadership SRU Radio Communications Coastal Passage Planning and Passage execution Navigation and pilotage in visibility (Night/Day) Navigation and pilotage conning in reduced visibility (Night/Day)

Collision Avoidance

Searching in open water

Vessel Emergency Procedures

Incident Scene Assessment

More information about the specific standards and competencies that form the core of the simulation training program can be found in the <u>CCGA-Pacific training standards</u>.

## 4.5.2.4 Training Log



The <u>Training Log</u> designed by CCGA-Pacific is more than just a record keeping book for completed training.

The log acts as a reference on key knowledge and competency areas for each competency level in the continuum of learning. It acts as a guide for a personal learning plan, and it outlines the performance standards one needs to achieve on the path to full accreditation. It exceeds the generic version of the Training Log described in the National Standard 2001.

#### 4.5.3 SMS - Training management

The <u>SAR Management System</u>, developed by the CCGA-Pacific in partnership with one of its <u>members' business</u>, offers the benefit of a sufficiently robust web accessible training database that is fully integrated to the operational environment. It provides full reporting capability on training completed by individuals and units, as well as statistical data at the regional level. The <u>web accessibility</u> of the system offers an efficient single data entry at source (Crew, Coxswain, Trainer, Unit Leader, etc..),

with the obvious caveat that like in all databases, the reliability of the output stems from the quality and consistency of data input performed by multiple users.



The system also allows members (<u>account holders</u>) to track their individual or unit's training path.

Reporting Interface - SMS.

With the planned roll out of the SAR Management System in two additional regions, this tool offers the possibility of meeting the recommendations of previous CCGA evaluations, at least with respect to the management of the training portfolio. It also offers the CCG a useful tool to readily access up to date information on the training features and output of the regions using the system, and to conduct adhoc audits of crew competency after any SAR tasking.

## 4.5.4 Training Standards 2001

From a pure training and instructional design program development perspective, CCGA- Pacific is clearly engaged on a path that leads the organization well beyond the minimum requirements of the National Standard 2001. The training system adopted an **approach** that addresses most elements of generally accepted practices in the design, development, delivery, evaluation and management of a training portfolio. This does **not** imply that the CCGA-Pacific system and content

should or could be exported to other regions. However its **elements** of good training system design, with well defined regional competency standards, course design, delivery strategies and training administration, offer good benchmarks.

CCGA-Pacific takes now a blended approach that combines new methods of learning and teaching in conjunction with technologies that are designed specifically to address volunteer needs. These needs exceed some of the requirements stated in the NTS2001 as a direct result of the CCGA-Pacific asset replacement program and CCG's concerns over new levels of operational safety. The new CCG-Pacific Crewing Standards, as issued by CCGA-Pacific, are listed below. They result from discussions held between the CCG and CCGA in Pacific region, and reflect the specific nature and conditions in which CCGA-Pacific wishes to commit its capability and resources in a 24x7 all weather service mode.

#### **CCGA- Pacific Crewing Standards**

#### **Owner Operators:**

Already exist as a vessel class. Their minimum required training standards are broken down as follows:

A) Pleasure Craft - The training standard is Pleasure Craft Operator Card (PCOC).

B) Commercial Vessels - The appropriate Transport Canada certificate for the size vessel.

#### Fast Response Craft (FRC) - Vessel Descriptions:

A) Type 1 FRC: Already exist and are in service. Type 1 FRCs are recognized as:

• Hurricane 640, 733, 753

• Zodiac MKV, MK VI, MKVII

- Titan 220, 249, 249XL
- Tornado
- Other (Unit 2, Unit 60, Unit 27 Whaler, etc)
- Type 1 vessels are separated into cabin or Delta / T-Top configurations

• Cabin vessel sub-types are classified as having a roof and windows on at least 3 sides

It is the intention of the CCGA-P to standardize this class of vessel in the future.

B) **Type 2 FRC**: Is in the design stage and will be a standardized vessel. These vessels will be:

- Less than 5 GRT
- Less than 35' in length
- Powered by twin diesel engines
- Propelled by water jets
- Cabin style boats with crew and passenger treatment areas inside of the cabin

• Self righting capable

C) **Type 3 FRC**: Are in the construction stage and will be a standardized class. These vessels will be:

• Greater than 5 GRT

- Approximately 40' in length
- Powered by twin diesel engines
- Propelled by water jets
- Cabin style boats with crew and passenger treatment areas inside of the cabin
- Self righting capable

#### Fast Response Craft (FRC) Vessels - Manning / Training Standards:

Type 1 FRC - Delta / T-Top - will carry a minimum of 2 crewmembers at all times. Crew complement and minimum training shall consist of:

• Coxswain - Successful completion of RHIOT School

• Crew #1 - Successful completion of Crew Level 1

**Type 1 FRC - Cabin Vessels** - will carry a minimum of 3 crewmembers at all times. Crew complement and minimum training shall consist of:

- Coxswain Successful completion of RHIOT School
- Crew #1 Successful completion of Crew Level 1 Standard
- Crew #2 Successful completion of PCOC, VHF, and Standard First Aid

• Either the coxswain and/or the senior crewmember must have successfully completed simulated electronic navigation training (SEN Limited or CCGA-P Simulator Course)

**Type 2 FRC** - will carry a minimum of 3 crewmembers at all times. Crew complement and minimum training shall consist of:

- Coxswain Successful completion of RHIOT School
- Crew #1 Successful completion of Crew Level 1 Standard
- Crew #2 With PCOC, VHF, Standard First Aid

• Either the coxswain and/or the senior crewmember must have successfully completed simulated electronic navigation training (SEN Limited or CCGA-Pacific Simulator Course)

This is the proposed vessel replacement for Units 1, 2, 9, 27.

**Type 3 FRC** - will carry a minimum of 3 crewmembers at all times. Crew complement and minimum training shall consist of:

• Coxswain - Successful completion of RHIOT School and 60 Ton limited Master course with or without sea-time for official Transport Canada Certificate

- Crew #1 Successful completion of Advanced Crew Standard
- Crew #2 Successful completion of Crew Level 1 Standard

• Either the coxswain and/or the senior crewmember must have successfully completed simulated electronic navigation training (SEN Limited or CCGA-P Simulator Course)

This is the vessel that is under construction for Unit 35 - Victoria and is the only proposed vessel in this class at this time.

#### Additional training requirements for CCGA-P members:

To be considered active and current, all **coxswains** in all classes of vessels must accumulate 25 hours of sea time within the previous calendar year in vessels of similar type.

To be considered active and current, all **certified crew** in all classes of vessels must accumulate 20 hours of sea time in any CCGA-P vessel. Alternately, certified crew may submit 20 hours of Transport Canada (TC) approved sea time (commercial sea time) signed by the master of a similar vessel.

Electronic simulation on SIM should be defined as successful completion of NET SIM modules as well as the full SAR navigation simulator course (4 days).

Effective immediately it will be the <u>coxswains' responsibility</u> when coming on duty to notify the Joint Rescue Coordination Centre (JRCC) if the above standards can't be met or to report any deficiencies <u>prior</u> to accepting a tasking. JRCC Coordinators may still choose to task these units for limited operations (i.e. fair weather, daylight, search only, etc). After May 15, 2008 however coxswains will take their units out of service if they cannot fully meet the standards.

These standards will be reviewed as necessary to insure that adequately trained crews are available for tasking by JRCC. All vessels (coxswains) should anticipate the requirement to have <u>SVOP</u> and electronic navigation on the simulator in subsequent years.

#### 4.5.5 Issues and Observations

Training programs established in each of the 5 CCGAs is the result of a compromise between the CCGA stated mission, the National Training Standard, organizational objectives and internal capacity, geographical challenges, varying audiences, available expertise, and allocation of resources. CCGA-Pacific's mission is to provide a volunteer marine rescue service and to promote public Boating Safety throughout the Pacific Region. With an asset renewal program fueled by substantial fundraising and with the help of key internal human resources and sources of expertise, it has also embarked on a mission to be a leader in maritime SAR, and the evolution of its training program supports that ambition.

However, he comparatively advanced stage of the training system in CCGA-Pacific is not without some challenges:

1- A trend to increase vessel capability puts increasing pressure on competency standards, which in turn can increase the long term cost of recruitment, training and retraining crews. The NTS2001 refers to "minimum competency requirements", and is based on operational assumptions that prevailed in the late 1990's. CCGA-Pacific is clearly venturing beyond that framework, whereas other regions have not. As this is a deviation from the norm, it may be useful for CCG and CCGA-Pacific to clarify their mutual understanding of the "common baseline" of training so that CCGA-P can

identify its long term funding requirement and sources to sustain the new training regime.

2- It is reported that competency levels still vary amongst units. The SAR Management System can now capture these variances and training effort allocation can be adjusted accordingly. But with the number of initiatives in development or implementation, the new crewing standards to be met, and a Safety Management process to be implemented, the ARTE team may become over stretched in the short term and may not face all demands in a timely manner.

3- The CCG reported that the RHIOT school still contends with inconsistent entry level competency demonstrated by some CCGA members. Although CCGA-Pacific sreens its candidates for the RHIOT school, some adjustment in candidate profiling may be required.

4- The renewal of assets is proceeding at a relatively high pace. The region is also engaged in several initiatives often involving the same core group of dedicated volunteers. Aside from the sometimes unavoidable fatigue, the whole foundation of a training program can be rendered fragile by evolving too fast and not allowing a proper consolidation and fine tuning of its elements. A steady-state period allows for a proper evaluation of program outputs, highlights needed adjustments in resources, enhances consistency and strengthens the foundation for future initiatives. CCGA-Pacific should plan for an integration and consolidation period, to assess, evaluate and adjust as necessary the various elements it has already put in place in its training system.

4-The addition of an appropriate monitoring or safety management system will go beyond the reliance on a coxswain's or an operator's responsibility to vouch for crew competency. It will instill a disciplined process of continuous improvement that is required to support the higher level operating environment promoted and sought for by CCGA-Pacific in its quest for a higher operating standard.

The CCGA-Pacific training system also offers some features that could clearly enhance the consistency and persistency of training outcomes:

1- The SAR Management System meets most requirements for the tracking and management of training records. While it does not offer other normal training administration features (scheduling, course loading, etc..which it was not designed to do), it may offer some interesting potential as a human performance support system: (a) through the insertion of help files that could act as job aids for members in the various functions and duties of their job (administrative, operational, training streams) and (b) by supporting a knowledge network accessible by any user of the system. This knowledge network could become a powerful tool that supports a continuous learning culture amongst users.

2- The Netsim and FRCsim are initiatives that make sense in the context of CCGA-Pacific. Given the number of coxswains on record in this region and the operational mode they wish to offer, consistency of training outcome becomes highly important. This review was not mandated to look into the cost-benefit analysis of such training delivery methods against other possible options (station by station operational training and on-water-exercise testing of coxswains), however the approach offers the possibility of reaching consistent training outcomes by streaming all candidates through a single medium of training with controlled environment.

3- CCGA-Pacific has a sound web strategy fitting its membership. Its website serves both the public domain and the internal communication and training needs with membership. With its archiving features and integration of the Netsim and SAR Management System, it is evolving into a knowledge portal whose elements could, to some extent, be replicated at the national level to benefit other regions.

## **5 Cross Regional Activity Overview**

Training of CCGA volunteers in all aspects of search and rescue is a critical component supporting their safe and efficient undertaking of SAR missions. CCG has offered significant support to each of the CCGA corporations in the development of training activities and, where applicable, the training of internal CCGA instructors and evaluators.

Both the CCGA and CCG estimate that the majority of Auxiliary members meet these minimum standards. The CCG Pacific region raised concerns over a potential shortfall in competencies stemming from the increased capability of assets acquired or being acquired by CCGA-Pacific. Steps are being taken to address those concerns and the recently announced CCGA-Pacific Crewing Standards should provide the reference scheme against which these requirements will be measured.

According to the National Training Standards, both the CCG and CCGA have a mutual obligation to:

ensure that instructors are appropriately qualified and experienced for the particular types and levels of training duties assigned to them according to the corresponding assessment of competence described in the Competence Tables in this standard; and

ensure that instructors and assessors are appropriately qualified and experienced for the particular training and assessment of competence for which they are given responsibility.

CCG and CCGA have worked and continue to work at fulfilling that obligation where applicable. There is a growing awareness and acceptance within the CCGAs that they must build self-reliance and internal capacity to deliver training, albeit under the functional monitoring of their regional CCG SAR Training Officer. Some corporations may eventually achieve a position to take complete ownership of this responsibility.

SAR prevention activities have historically been an integral part of CCGA activities, but are now carried under monitoring of and training by Transport Canada's Office of Boating Safety. Although not the subject of this overview, it was noted that outstanding issues between TC and the CCGA may have a negative impact on future recruitment potential in some regions, or even the retention of existing volunteers in others.

## 5.1 Overview Matrix

The Overview Matrix of the NTS2001 Standard criteria is attached. It outlines the main NTS conditions and the related status of each region according to information made available.

The initial NTS2001 adopted wording that offers flexibility to each corporation in meeting the stated objectives. A review and update of the NTS2001 would serve to clarify intents and assumptions in the present reality, and provide guidance for the future evolution of training programs and their management.

## 6 Conclusions and Recommendations

This review clearly indicates that the Auxiliary as a whole has put in place and continues to implement elements of the framework outlined in the National Standard 2001, with the support of the Canadian Coast Guard in each region.

However, three general undercurrents appear to influence each of the 5 regional corporations in their management of the training portfolio:

(a) the fish harvester community of the east provides a service as Auxiliaries because they are professionally linked to maritime activities and see this service as a natural extension,

(b) the mixed membership of the central community is structuring its available resources to support the CCG and the SAR system to the best of its abilities within available means, and

(c) the western community is inclined to align its services along the model of a lifeboat institution, supported by a unique access to external funding

These undercurrents explain to some extent the diverging evolution of the 5 training portfolios, following the inception of NTS2001. Each Auxiliary's action plan is set against specific circumstances, conditions, aspirations, funding realities, style of membership and recruitment/succession issues. Accordingly, regional training and recruitment programs vary in focus, scope and methods. Corporations use their own benchmark criteria and strategies to validate trainer and member competency, program content and training outcomes.

The first version of the National Training Standard provided a reference point to assist the 5 corporations in assuring the minimum level of competency required to safely provide Auxiliary services to the SAR system. It also provided guidance on the key organizational elements needed to manage and deliver cohesive training programs. The CCGAs have responded, each in their own way.

The findings listed below address some elements of the CCGA training system. The associated recommendations offer a possible course of action to strengthen its foundation as a "national" system, yet recognize the above mentioned undercurrents and the probability of continued variances amongst the 5 CCGA training programs.

#### **Findings and Recommendations**

# F1. The National Training Standards 2001 edition (NTS2001) remains incomplete since its inception.

*R1- A workgroup should be struck between CCG and CCGA to update the Standard with a view to* 

- 1. confirm/adjust the common minimum requirements across regions according to the reality of 2008;
- 2. define competency standards for the training functional stream;

- 3. define or remove competency standards for the administrative stream;
- 4. specify clear planning and performance evaluation standards for the training function;
- 5. assess the need for competency standards for the operation of fast rescue craft, which are increasing in numbers amongst several regions.

*Note: The Canadian Coast Guard College is the appointed Coast Guard custodian of the NTS and, as primary agent for the delivery of CCG training, may be the relevant agent to facilitate this review, as it was in the creation of the Standard in 2000-01 .* 

F2. Most corporations have in place a curriculum that addresses the majority or all of the competency items listed in the NTS2001. However, each curriculum was developed independently, with or without course training standards, master training plans or evaluation material. Without such standardised documentation, it is difficult to validate the extent to which training achieves the desired competency outcome in a consistent fashion across regions, and even within regions.

R2 - The CCGA, assisted by the CCG, should undertake the development of national Master Lesson/Course Plans, course training standards and evaluation material for common competencies. This standard reference training material should be wharehoused electronically on a common training network, for easy access and retrieval by any trainer or member of the CCGA. This core material could then be supplemented regionally with training material addressing local requirements.

F3. A significant portion of the training investment is made in On- the-Water Exercises, whether internal to the CCGA, jointly with CCG and/or other agencies, or in the form of competitions. Depending on the assessor involved, these exercises are at times more evaluative (test) than training (learning) in nature. The benefits of these activities are evident in assessing operational competencies, and regions are developing their evaluator/trainer capacity to manage those activities along regional guidelines and procedures.

R3- The CCG-CCGA should create a national guide for assessors/evaluators that would consolidate best practices and establish standard procedures. The guide would serve to train assessors/evaluators to a national standard of assessment and evaluation.

F4. The 5 regions of the CCGA are at various stages of organisational development and delivery capacity to meet all intended objectives and competencies of the existing NTS2001. Demographic trends, renewal of regional assets and potentially evolving roles are additional factors bearing on inter-regional variances. Moreover, regional CCG SAR have the authority to require additional operational competencies that are justified by the circumstances of their own region. R4- The CCGA should <u>delay any consideration to raise competency standards</u> until such time as the existing standards are met reliably, consistently and broadly amongst its membership through solid and performing training programs. The only exception would be the consideration of a national Fast Rescue Craft Operator competency standard, given the inception of this type of asset in several regions. Other regional needs in excess of the present standards should continue to be dealt with as a regional deviation, as provided for within the existing NTS2001 (updated as per R1).

F5- Training information is exchanged between regions at the management level of the CCGA, but it appears that there is little or no horizontal and direct communication between coordinators/deliverers of the training function across regions. This results in most CCGA training coordinators working in silos with their regional CCG counterparts and independently from other CCGA regions.

R5- CCGA/CCG should establish a knowledge network or forum of training coordinators/deliverers in conjunction with R2 above, to exchange information and share best practices on an ongoing basis. This network should be monitored by a CCG focal point of training expertise.

F6- Zonal training plans for on-the-water exercises or local training sessions can be a hit and miss activity, when planned attendants cancel out. Re-occurrence of onsite training opportunities may be limited and as a consequence some members or units may fall short in competencies or retraining if attendance is not mandatory.

R6- The SAR Management System should be deployed as the training management tool to plan unit and individual training requirements, measure training management performance and perform vessel competency audits. Regions can retain authority as to the method of data entry (centralized or distributed input) that corresponds best to their organizational requirements. The training system's management would become more consistent within regions, and more seamless on a national basis.

F7- Each CCGA corporation developed, with the assistance of CCG or other partners, its own training and evaluation program to train internal instructors and evaluators. While these regional initiatives meet the objectives of the NTS2001, the lack of a CCGA wide approach may lead to inconsistent training delivery outcomes from region to region.

*R7-* The CCG/CCGA should consider the creation of a national CCGA instructor/evaluator accreditation program with defined competency standards and components of which could be acquired locally and/or through distance learning from approved sources.

# F8- Training Logs have not been implemented or used consistently across the 5 regions since the inception of the concept in the NTS 2001.

R8- The CCG/CCGA should review the need for a Training Log as a National Standard. As regions adopt an integrated training management tool that tracks individual learning path for the member, this particular standard may be perceived as irrelevant to the needs of some corporations. However, should this standard be continued, its upkeep by members should be verified and validated from time to time.

# **F9-** The National Office of the CCGA plays a limited supporting role in the delivery of internal training services to members.

R9- The National CCGA website could provide a common platform (a) to archive all electronic versions of training material produced by CCGA corporations, (b) to host online forums for inter-regional networking of trainers, and (c) to host online training videos or text material that may be produced by CCGAs corporations from time to time. The 6 CCGA corporations should also consider pooling their resources to offer a single portal to interface with all CCGA membership, leaving content management under control of each corporation for specific sections that are relevant to their respective corporation. This would enhance a common look and feel, encourage cohesiveness and consistency of information, and perhaps grow further the "national" stature of the Auxiliary's body of knowledge and expertise.

# F10- While promoting the use of National Standards of Competencies, the CCG relies on regional CCG SAR Training Officers to support each CCGA corporation. The CCG does not have a clear national focal point of training expertise to support, monitor and enhance the cohesiveness of regional CCGA related training activities.

*R10- The CCG should designate a focal point of <u>training</u> expertise to monitor the CCGA training portfolio. This focal point need <u>not</u> be a full time function, and would serve to detect trends and facilitate exchanges between regional training interests.* 

# F11- Although training activities target "members" of the CCGA, it is noteworthy that a substantial number of crewmembers aboard owner/operated FVs may not be subjected to any training other than On-the-water exercises, and those resources may not be registered in any training database.

R11-No recommendation. The present Standard describes crew member competencies for <u>registered</u> CCGA members only. Owner- operators are responsible for the competency of non registered crew members, and community-operated units across all corporations are crewed with CCGA members only, who must undertake the relevant CCGA training program.

F12-In a relatively short time frame, CCGA-Pacific has accelerated the renewal of its assets with more capable craft, while implementing new training initiatives, and creating regional crewing standards. The resulting rapid growth in

demand on its core training providers may take a toll on their effective deployment or training outcomes in the short term - and weaken the training system's foundation over the medium term.

R12- CCGA-Pacific should give consideration to plan for a "consolidation" phase of 12-18 months where the region would take the time to evaluate each element of its training system for optimal performance, resourcing and cohesiveness.