CANADIAN COAST GUARD AUXILIARY – PACIFIC VESSEL STANDARDS

INTRODUCTION

The purpose of the vessel standards is to regulate the CCGA-P fleet in order to increase safety for our members, boost performance, and establish a CCGA-P brand to promote the good service of the organization and its members.

As units move to larger, faster, more complex and technically challenging vessels, the CCGA-P must ensure that vessel construction and training plans do not put the lives of members and clients at risk. Increased performance should not come at the expense of safety. This document balances the need for high performance levels against any increased safety risks.

VESSEL CLASSES

Class A:

Fast Response Craft (FRC) – 7m to 11m with a maximum of 5 gross tons. The vessel is a rigid hull inflatable equipped with twin engines and configuration specific standards. These vessels are the standard of the fleet and make up 80% of all vessels. Any of these vessels 10m or over will require an approved naval/marine architect's drawings and would require the management team's involvement throughout the process.

- A1 FRC Delta Configuration: Outboard powered, re-righting equipped, no windshields or emergency steering. These vessels will be used in the high risk operational areas covered by the CCGA-P DRV's.
- A2 FRC T Top Configuration: Outboard powered, standup console with bolster and secure positions for four crew members. These vessels will be used in low and medium risk operational areas.
- A3 FRC Cabin Configuration: Twin engine rigid hull inflatable with enclosed or semi-enclosed cabin. Power type and amount appropriate to vessel purpose and design. Cabin vessels will be free of tinted glass and be equipped with water tight windows and doors. Cabin vessels will have an adequate ventilation system to prevent condensation and impaired vision. These vessels may not exceed 5GT and will be used in low, medium and high risk operational areas.

Class B:

Inshore Lifeboat (ILB) – These vessels will be larger than 11m but not exceed 14m LOA at the water line (14m is the proposed maximum LOA for any CCGA-P DRV). The tonnage will be between 5 gross tons and 15 gross tons (15GT is the proposed maximum for any CCGA-P DRV). The vessel will be a twin engine rigid hull inflatable. The standards applicable to all vessels in this class are not configuration specific. These vessels would require naval/marine architect approved drawings and would require close ongoing consultation with the management team. The ILB class is expected to make up 10% of the total fleet.

Class C - Unique Vessels:

There may be cases where the standard classes and configurations won't meet the needs of a unit's unique challenges. This situation would most frequently apply to owner-operated vessels or vessels under 7m. In order to address these needs, vessels will be considered under a "unique vessel" category. These vessels would be considered on an individual basis. All owner-operated vessels would be assessed by the management team.

The management team will use the following criteria for assessing "unique vessels":

- 1. Vessel training plan
- 2. Level of unit training
- 3. Community impact
- 4. Coast Guard consultation
- 5. Owner-operator involvement in unit

VESSEL CONSTRUCTION STANDARDS

Specific construction guidelines will be set out and called for when a new vessel is being considered. The question of size and horsepower will be based on the need in that particular area, whether a unit can support this type of vessel (membership and finance), and whether the unit has adequate training and appropriate competency certification in place now and in the future. The construction of all CCGA-P proposed new vessels must first have the management team's written approval for future acceptance into the fleet.

Manufacturers: All new vessels will be built to and comply with Transport Canada Standard 1332 or other standards referred to in Document 1332 including ISO 6185-3. In addition new vessels will also be built to SOLAS standards for aluminum boats and meet buoyancy testing for discharge of water. A manufacturer's proven history in the construction of fast response vessels is essential. The list of acceptable construction comparisons include the RCMP, Fisheries and Oceans, Coast Guard, Parks Canada, commercial companies as well as other international search and rescue organizations. It will be the manufacturer's responsibility to prove that their competency and qualifications meet the CCGA-P construction standards for RHI fast response vessels. New manufacturers will be required to provide documentary evidence of their capability in the construction of RHI fast response vessels. All CCGA-P aluminum vessel builders will meet or exceed construction standards for RHI fast response vessels and commercial vessels. All aluminum welding shall conform to the requirements of CSA Standard W47.2-M1987 (R1998) "Certification of Companies for Fusion Welding of Aluminium" Div 2.1 and shall be performed by persons currently certified by the Canadian Welding Bureau to CSA Standard W47.2-M1987 (R1988). Aluminum will be the preferred material for construction for the hull on all new vessels. Other composite material for working decks, console and T-Top will be acceptable.

Standard Features: All CCGA-P vessels will be equipped with shock absorbent seats. All electronic instrumentation will be standard utilizing the most current Raymarine equipment

which coincides with the CCGA-P Simulator Program. All new vessels will have the capacity for self righting. Aluminum will be the preferred hull construction material.

<u>Equipment</u>: All CCGA-P vessels will be equipped with the compulsory items set out in the CCGA-P Vessel Offer/Inspection (AVI) Form. All CCGA-P vessels will also be equipped with the SAR equipment required to undertake SAR activities, including salvage/fire pumps, blankets, tow assist hooks, basket stretchers, and spine boards. All CCGA-P vessels will be equipped with WH20X Honda water pumps.

New Design: Any proposed new designed vessels will require in-depth consultation with the CCGA-P Management Team before approval to proceed will be granted. Upon management approval in writing, a CCGA-P approved naval architect must be engaged to provide detailed plans for any new designed vessel. The plans will be reviewed by the management team and upon written approval construction may begin.

VESSEL STANDARDS IMPLEMENTATION

All aspects will be phased in over time with the target for implementation to have 75% of the fleet fully compliant within three years and 100% within five years.

TIMELINE

Completion of vessel standards: May 2007

Newly acquired vessels (new and used) must be compliant before being accepted. Owner-operator vessels offered for service must be compliant before being accepted.

Existing DRVs: May 2010

Existing owner-operator vessels: May 2011

VESSEL BRANDING

In order to establish the CCGA-P brand, standardized markings on vessels is an integral part of vessel standardization. The goal is to establish a uniform look and feel of our DRV fleet that is easily recognizable from a distance and close-up, and that is clearly search and rescue related, while being significantly different from our partner the CCG which operates in the same area.

The colour scheme chosen as the basis for this policy has long standing roots in SAR being the former colours of the CCG and the current SAR colours for DND aircraft. The colour scheme requirements laid out below will not require any changes for the vast majority of units.

The standard markings will apply to all CCGA-P dedicated response vessels owned by supporting societies or the CCGA-P, all vessels under construction or specification at the time of this policy coming into force, and all new or used vessels being offered to the CCGA-P for service as a DRV. All DRVs presently in service as DRVs with the CCGA-P at the time of this policy coming into force are subject to the requirements of the phase-in period for existing vessels. Owner-operator vessels are excluded from this branding.

Vessel Labeling:

The CCGA-P acknowledges that all vessels have different design characteristics and that not all vessels present the same amount of space for labeling. This guideline has been developed as a minimum that should be practical in most cases in order to establish consistency.

Minimum Requirements:

- 1. Licensed (commercial or pleasure) vessels will be labeled with the vessel license number as close to the bow as practicable in 3" block lettering.
- 2. All CCGA-P DRVs will be labeled with "RESCUE" in white block letters as large as practicable at a position approximately amidships on both sides of the hull or tubes (as appropriate) to ensure maximum visibility.
- 3. The word "RESCUE" shall be in white text no smaller than 6" in height
- 4. The phrase "Coast Guard Auxiliary" or "Canadian Coast Guard Auxiliary Pacific" shall appear on the hull or tubes (as appropriate) between the word "RESCUE" and the stern of the vessel.
- 5. The phrases "Coast Guard Auxiliary" or "Canadian Coast Guard Auxiliary Pacific" may be laid out as appropriate with white text size no smaller than 2" in height
- 6. Possible text layouts follow:

Coast Guard Auxiliary

Canadian Coast Guard Auxiliary — Pacific

Optional Vessel Labeling:

Vessels meeting the minimum vessel labeling requirements as prescribed above may carry additional labeling and marking *if space permits* as described within this section.

- 1. Society Identification:
 - a. Vessel owners may mark their vessel with their society logo, name or combination thereof as they see fit provided that the markings do not obscure or detract from the minimum required markings described above. These markings may be sized as the vessel owners see fit subject to the space available.

- b. Vessel owners are strongly encouraged to mark their vessels with their society name.
- c. Societies operating CCGA-P loaned resources may mark the vessels they are operating with their society name, however they must also include the following phrase-in the same area and in equal size: "Vessel provided by the CCGA-P"

2. Vessel Name:

Vessel name while participating in authorized CCGA-P activities:

- d. Units operating more than one DRV within their unit from different locations will be permitted to mark their vessels with unit numbers currently unused but different than their own.
- e. Alternate unit numbers will be determined by the Manager of SAR/Operations in consultation with the affected unit leader.
- f. At least one vessel within a unit operating more than one vessel must be marked with the unit's own number.
- g. "Auxiliary XX" must be in contrasting colour and no less than 3" in height.
- h. "Auxiliary XX" may be placed anywhere on the hull, tubes or houseworks provided it is visible from abeam while the vessel is underway while planing and at low speed.

3. Given Vessel Names:

i. Vessels may be marked with the "given" names of their vessels in whatever fashion and location that the owners see fit provided such markings do not obscure or detract from required markings.

4. Unit Number & Location:

j. Vessels may be marked with identification of the CCGA-P unit & location of the unit if desired (or if room permits).

5. Relief & Spare Vessels:

k. Vessels not used for active duty may be marked with one of the following phrases: "Relief Vessel" or "Spare Vessel" if the vessel owners choose to do so.

6. Markings Visible from the Air:

- l. Vessel owners are strongly encouraged to place large markings in contrasting colours on surfaces visible from the air identifying their vessels.
- m. Suggested markings are: "AUX XX" where XX is the unit number.
- n. Minimum suggested text height is 18"

7. CCGA logos:

Vessel owners are encouraged to place CCGA-P "liferaft" logos on their vessels in conspicuous locations as available.

8. Other Vessel Markings:

- o. Vessel owners must get approval in writing from the management team before applying any other markings to their vessel including sponsor or supporter markings.
- p. Vessels may be marked with labeling, decaling or branding from sponsors or supporters provided these markings do not obscure or detract from minimum required markings.
- q. Any other markings including sponsors, supporters or markings not covered within this policy specifically must be principally of a colour other than white.

Prohibited Markings:

1. CCGA-P DRVs may **NOT** display the "Canada" wordmark.

Canada

- 2. CCGA-P DRVs may **NOT** display the diagonal white hull stripe (or combination of multiple diagonal white stripes). This includes diagonal stripes on tubes for RHIs.
- 3. CCGA-P DRVs may **NOT** display the words "Coast Guard" or "Canadian Coast Guard" as stand-alone phrases or with significant separation between these words and the word "Auxiliary".
- 4. Vessels on loan from CCG are exempt from the requirements of this section.

Other Vessel Markings:

1. Vessel markings not covered within the scope of this policy should be brought to the attention of the CCGA-P Manager of SAR/Operations who will consult with the CCGA-P board for discussion.

Vessel Colouring:

Tubes:

- 1. The tube colour for CCGA-P DRVs is red, other colours are acceptable as described below
- 2. Existing CCGA-P DRVs with orange tubes will not be required to change colours. Vessels retubing will be required to change colour during refitting in compliance with this policy.
- 3. Existing CCGA-P DRVs with tubes coloured other than orange or red will be required to change colours as per the phase-in section of this policy.

Housework and structures:

- 1. The colour for houseworks, consoles and other structures on deck (excluding tow assemblies, arches and re-righting frames) is yellow. Other colours are acceptable as described below.
 - a. Existing CCGA-P DRVs with houseworks and structures (e.g. consoles) in orange will not be required to change colours unless the opportunity arises.
 - b. Existing CCGA-P DRVs with houseworks and structures in colours other than yellow or orange will be required to change colours as per the phase-in section of this policy.
 - c. Deck mounted structures such as re-righting frames, tow assemblies, rope guards are not covered within this policy.

Hull above the waterline:

- 1. The colour for the hulls of CCGA-P DRVs is red, other colours are acceptable as described below.
- 2. Existing CCGA-P RHIs with orange, yellow or bare aluminum hulls will not be required to change colours unless the opportunity arises.
- 3. Existing CCGA-P DRVs with fiberglass hulls in their original colour other than red (molded gel coat finish) may be considered for exemption from this requirement on a case by case basis.

Hull below the waterline:

- 1. CCGA-P DRVs shall not have bottom paint in black or any colour that does not contrast sharply with the prevalent water colour in their normal area of operations.
- 2. CCGA-P DRVs with molded fiberglass hulls in orange, yellow, or red are recommended to be left without bottom coatings unless required by growth in the local area.

Phase-in Period for Existing Vessels:

The guidelines and phase-in periods presented within this policy are intended only to provide affected societies an adequate amount of time to make the required changes without incurring unnecessary vessel downtime. Vessel owners are strongly encouraged to make the required changes at their earliest opportunity.

Exemptions:

Vessel owners who believe that compliance with the requirements set out within this policy are impractical or cannot be met in a reasonable manner are required to notify the management team in writing as soon as possible. Exemptions from the requirements of this policy will not be entertained by the management team after a period of six (6) months following the vessel standards execution date.

Extensions:

Vessels owned by societies that are financially unable to comply with the requirements set out within this policy may make application to the CCGA-P management team for an extension to the timelines prescribed within this policy.

Any applications made for extensions to the timelines prescribed must be received no less than six (6) months in advance of the deadline dates.

Labeling:

Permanent labeling that is not in compliance with the requirements set out in this policy should be brought into compliance within twelve (12) months of this policy coming into force.

Temporary labeling in place at the time of this policy coming into force should be brought into compliance with the requirements set out in this policy within six (6) months of this policy coming into force.

Vessel Colouring:

Tubes:

Tubes that must be painted or replaced in order to comply with the requirements set out within this policy should be completed within twenty-four (24) months of this policy coming into force.

Housework and Structures:

Houseworks and structures that are required to be painted (or have colours changed by other means) must be completed within twenty-four (24) months of this policy coming into force.

Hull above the waterline:

- 1. Changes to colouring required by this policy to the hulls of DRVs above the waterline must be completed within twenty-four (24) months of this policy coming into force.
- 2. Changes to markings on the hulls other than labeling should be completed within three (3) months of this policy coming into force. This includes the removal, or covering of prohibited markings. Temporary corrective measures are acceptable (i.e. covering with appropriately coloured self-adhesive vinyl).

Hull below the waterline:

- 1. Changes to colours of applied bottom coatings should be made as soon as practicable (i.e. at the next scheduled re-coating).
- 2. Any vessels using black bottom coat **must** be recoated in an appropriate colour within thirty-six (36) months from this policy coming into force.

Unlike the other requirements specified in this policy, this requirement is **safety driven; it is important to the CCGA-P that any DRV that may become capsized be readily visible. With this in mind vessel owners with vessels using black bottom coat are encouraged to have their vessels recoated in an appropriate colour immediately.

Maintenance of Vessel Marking and Labeling:

1. Vessel marking and labeling must be maintained in the best shape and condition possible. The condition of vinyl lettering, decaling and marking is readily visible and could be used by members of the public to draw inferences to the general maintenance and upkeep of the vessel as a whole.

Financial Implications:

- 1. Vessels purchased after this policy comes into force that require changes to comply with this policy will be done entirely at the cost of the vessel owners.
- 2. The CCGA-P will endeavour to assist vessel owners with the acquisition and provision of required labeling as funding permits. It is the responsibility of the vessel owner or unit to advise the CCGA-P Manager of SAR Operations of their requirements.

VESSEL BRANDING EXECUTION TIMELINE

Completion of vessel standards: May 2007

Changes to hull markings (other than painting): August 2007 Temporary labeling coming into compliance: November 2007

Applications to management team for extension on vessel marking deadlines: November 2007

Permanent labeling coming into compliance: May 2008

Tubes, housework and structures, and hulls that require painting: May 2009

Black hulls below the waterline: May 2010