



MARINE RESCUE QLD

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CODE OF PRACTICE

MINIMUM

CONSTRUCTION - FIT OUT - OPERATING STANDARDS

FOR

HIGH SPEED FIRST RESPONSE VESSELS

V.M.R.A.Q. AFFILIATED SQUADRONS

ACCREDITED

RESCUE VESSELS

CLASS 2C OFFSHORE

CLASS 2D PARTIALLY SMOOTH WATERS

CLASS 2E SMOOTH WATERS

DATE OF ISSUE: 1st October 2010

FORWORD

This Standard must be read in conjunction with the Standard Specification for VMRAQ accredited Primary Rescue Vessels and the Funding Guidelines.

Note:

1. Available funding will be calculated on the above documentation in consultation with the boat builder and VMRAQ's consultant Marine Engineer/Surveyor.
2. All costs incurred for extra equipment required by a Squadron and increases in cost for larger vessels including engines required for the fitting of extra equipment will be borne solely by the Squadron.
3. All documentation to be considered conjointly must be dated October 2010 or later.

Boat Replacement Funding Arrangements

No funding will be made available for vessels that are prototypes or one off designs. Whilst the Association is mindful of the need to cater for the development of different types of vessels that may be justified in some areas of the state; the following shall be applied.

- Units are required to obtain approval from the State Association prior to purchasing any type or size of vessel so that appropriate registration, insurance and work cover can be provided.
- Any such project must be endorsed by the State Association Council as it may at its sole discretion determine. In addition, the State Association is to have a management role as determined by the State Association Council for every vessel being constructed or purchased whether direct funding is being provided or not. In some instances, usually smaller vessels, contractual arrangements may be approved between suppliers and Squadrons.

Process for Vessel Construction; Fit Out & Funding.

State Association is to ensure that:

- Each vessel is designed by an MSQ approved designer or equivalent.
- Independent approval of the design is sought.
- The design must meet MSQ Survey approvals and the vessel registered in Queensland.
- The vessel specifications are in accordance with State Association Standards.
- An Association approved Specification and Contract are used, ensuring "right of tenure" – and that "Prescribed Documentation must be obtained before each progress or any payment is made".

- An independent Marine Engineer/Surveyor is employed by VMRAQ to supervise the construction, fit out and initial tests and costs will form part of the project cost.
- VMRAQ will not provide funding nor will it approve any vessel that digresses from a design and or has not been proven in commercial operations or its' design is not supported or approved by the VMRAQ independent Marine Engineer/Surveyor.

Note: The above consists of excerpts from a directive from the Department of Emergency Services in August of 1999.

VMRAQ APPROVED BOAT BUILDERS, DESIGNERS & SURVEYORS.

e.g.

1. Noosa Cat Australia. (Noosaville)
2. Kevlacat. (Mooloolaba)
3. Cairns Custom Craft.(Cairns)
4. Woody Enterprises (NAIAD) (Tingalpa)
5. Queensland Ship Surveyors (Graeme Normington) (Cairns)
6. T. D. Marine Surveyors. (Terry Davis) (East Coast)

Note: The above list is not limited. A Squad considering any other ship builder or surveyor may submit a request for approval to the State Association for consideration.

OPERATING STANDARDS:

The following details the operating standards for V.M.R.A.Q. Rescue Vessels. These standards incorporate the requirements as detailed under the Queensland Marine Safety Act and Regulations as well as the policy of V.M.R.A.Q. concerning the operation of Vessels. These standards apply to all vessels operated by V.M.R.A.Q. Affiliated Squadrons and all personnel who are involved in and responsible for the operation of these vessels.

It is the responsibility of all personnel who are involved in the operation of vessels for VMR purposes to be conversant with the details specified in these standards as well as any Squadrons specific Standard Operating Procedures (SOPs') that relate to the operation of such vessels.

REGISTRATION:

All V.M.R.A.Q. Rescue Vessels must be surveyed and registered as commercial vessels either class USL2C, USL2D or USL2E. These vessels are issued with A4 size registration certificates that detail the conditions under which the vessel may be operated.

Certificate,

The current registration certificate is to be kept on board each vessel. It is suggested a copy of the original certificate be laminated and displayed in your Unit's operations room. Where it is not practical to display the original certificate on board the vessel, a laminated copy may be stored on the vessel in a secure place and the original certificate should be stored in a secure place at your Unit Base.

Numbers:

The registration number must be clearly displayed on each vessel in accordance with Qld. Transport requirements.

MSQ Requirement: (Licensing)

MSQ requires that the names and licence numbers of all VMR Unit Masters must be displayed and or stored on all vessels on a Squadron letterhead in a laminated pouch.

CARRIAGE OF PERSONS & AREA OF OPERATIONS

Carriage of Persons

A member who has not completed Induction & SOPs' is not permitted on a VMRAQ Vessel.

The maximum number of persons that the vessel is registered to carry must NOT be exceeded except in the following circumstances:

In effecting a search and rescue operation, the maximum number of persons carried may be exceeded. However, the safety of the crew and any other persons remains the responsibility / liability of the Master of the vessel.

Note: The actual number of persons / crew may be further limited by the restrictions imposed by the amount and or type of safety equipment carried on the vessel e.g. Number of Coastal Life Jackets and or size of Life Raft.

Carriage of Other Persons

In other than a Search & Rescue situation, where a Squadron is required to carry other persons, the following criteria MUST be met:

- SOPs' must be developed to cover these situations.
- Provide a briefing on safety procedures and the use of safety equipment.
- Only appropriate personnel, appropriately qualified, may man the vessel.
- Crossing of coastal bars, in other than calm conditions, must not be attempted.
- Notwithstanding, the Marine Safety Regulations and any limitations must NOT be exceeded.

Area of Operations

All VMRAQ Rescue Vessels are limited in their area of operations by virtue of their designated registration.

All vessels under 7 m are limited to either smooth or partially smooth waters except for Rescue Vessel tenders. Where a vessel under 7 m is specifically built to proceed offshore, this vessel must be manned by a master and crew who have been specifically trained for the purpose.

Vessels must NOT be operated outside these designated areas except in the following circumstances:

- In effecting a search and rescue operation, the area of operation may be exceeded by one level e.g. 2E to 2D; 2D to 2C; 2C to exceed 50 NM, on condition that the Master of the vessel and the Squadron Controller agree.
- Both parties MUST agree. Notwithstanding, the safety of the crew and any other persons, remains the responsibility / liability of the Master of the vessel.

- Exceptional circumstances, outside the rulings above, are to be submitted to the State Association for consideration and approval on an individual basis.
- Training in adverse conditions MUST be preceded by a risk assessment given the prevailing circumstances at the time and the Squad UTC, Controller and the Master of the vessel must all agree and crew must be kept to a minimum.
- Towing of any vessel must be preceded by a Risk Assessment taking into account the prevailing circumstances and conditions at the time and include experience of Master and crew as well as available physical resources.

CREWING

Qualifications for Master:

VMRAQ Rescue Vessels may only be mastered and crewed by personnel who hold the required Certificates of Competency as issued by VMRAQ. This certification is approved by Queensland Transport as the qualification required to operate VMRAQ Rescue Vessels under the provisions of the Marine Safety Act and Regulations.

The limitations as may be set out upon these certificates must NOT be exceeded under any circumstances.

Note: A VMRAQ Certificate of Competency does not provide certification for the operation of vessels for purposes other than VMRAQ and DCS approved activities as follows:

Core Activities are:-

- Search & Rescue Operations, either self activated or activated by State or Commonwealth Authorities.
- Providing assistance to disabled watercraft (in the first instance) irrespective of whether the person is a member or not or is a commercial vessel e.g. Hire Boat.
- Medical Evacuations.
- Disaster Operations as defined in the Act where activated by EMQ.
- Activities, authorised by the Queensland Police Service, State Emergency Service, Queensland Ambulance Service, Queensland Fire and Rescue Service; for which they take responsibility.
- VMRAQ vessels may not be used as a platform from which to fight fires.
- Approved training for the above activities.

Authorised Activities are:-

- Providing safety and support services at community and or aquatic events.
- Ceremonial occasions e.g. Sail Pasts etc.
- Unit equipment and facilities maintenance and administrative duties.
- Approved fund raising, social and promotional activities but not including activities relating to the operation of permanent licensed premises / bars where they are open to the public e.g. Supporters Clubs.
- **All other activities must be submitted to the Association for approval upon consideration and advice.**

Where VMRAQ Members are being trained at a formally recognised training activity, the following requirements apply:

- Vessels may be operated by VMRAQ Members who are undergoing training and not hold the appropriate Certificates of Competency, provided the vessel is under the direct supervision of a currently qualified master.
- The limitations contained upon the qualified supervising master's Certificate of Competency must NOT be exceeded.

Crew Numbers:

The minimum crew for VMRAQ Rescue Vessels engaged in or assisting in operational activities shall be two (2) or a number as laid down in the Unit's Standard Operational Procedures for the operation of individual Rescue Vessels, whichever is the greater.

Commercial Activities.

It has been determined by MSQ (As per the Transport Operations Marine Safety Act & Regulations) that all and or any marine activities which are not covered under our **Core or Authorised Activities** above, involving the use of VMR Vessels, are in fact specific Commercial Activities and therefore in certain instances permits will need to be obtained from MSQ to use the vessel for that which it is not registered and in all cases a holder of a current MSQ issued commercial licence along with appropriately qualified crew will be required to master and crew the vessel.

OBLIGATIONS OF THE MASTER

Under the Marine Safety Act and Regulations, to ensure the safety of the vessel and crew, the Master of a VMRAQ Rescue Vessel has the following obligations :

To operate the vessel in a safe and seaworthy manner. This involves, but is not limited to;

- All necessary safety equipment is serviceable and on board the vessel.

This may involve the provision of safety equipment additional to that which is detailed in this and or other standards.
- The vessel is appropriately crewed.

This may involve ensuring that there are sufficient crew and that all crew are appropriately trained and briefed to perform the allocated tasks in a safe manner.
- The vessel is capable of safely undertaking the task allocated.

This may involve ensuring that the vessel is capable of operating within the limitations and within the conditions of the vessels registration and or conditions as may be experienced.
- The vessel is operated and navigated in a safe manner.

This may involve ensuring that the vessel is operated according to the International Regulations for Prevention of Collisions at Sea and any restrictions and conditions as detailed in the Marine Safety Regulations.
- Where more than one person on board holds a Master's Qualification.

Ensure that only ONE person MUST be designated as the ship's master and that person only, is in charge of the vessel and is responsible for it's safe operation.

2. To maintain the vessel's records as detailed in the Marine Safety Regulations.

- Vessel Operations Log.

This log details activities the vessel has been involved in and includes:

Date
Masters Name
Locations
Journey
Type of Activity
Start and Finish Times
Comments regarding the operation of the vessel
Refuelling

- Maintenance and Inspection Record.

These record details:

Motor service details
 Hull repairs and maintenance
 Safety equipment service, inspections and replacement
 Communications equipment service
 Navigation equipment service

The above records **MUST** be maintained and kept in a safe place (not necessarily on board the vessel). The records **MUST** be complete, accurate and up to date and kept for a period of five (5) years. No record is to be defaced, obliterated or erased by any person.

Note: The Marine Safety Act and Regulations impose severe penalties for persons in charge of vessels and or the owner of such vessels who breach the conditions of this legislation.

OBLIGATIONS OF SQUADRON MANAGEMENT

Squadron Management have an obligation to ensure that an investigatory committee is set up within their organisation to effect internal investigation and or assessment of any marine incident which causes or may cause a claim for damage to property or injury to a person.

Where a marine incident has occurred and the VMR vessel is involved; a marine incident form must be completed and submitted to MSQ and a copy sent to the Association.

This committee should be flexible in its content to enable immediate action and investigation by appropriately experienced personnel.

Note:

*It is important that all members of an organisation understand that the role of the investigatory committee is to **identify causes**, **NOT** to identify who is to blame.*

However, whilst it is not the role of the investigatory committee to place blame, this does not mean that relevant oversights or acts of omission or commission should be ignored. Human error plays a role in every incident.

This does not mean that the role of the Master of the vessel is the cause of the incident.

Nor does this mean that human error in determining individual work practices, work organisation practices, or the design practices which resulted in the work environment, should be used to trace blame to individuals.

The real questions to be answered are:

“Why did the incident occur?” and:

“What can we do to ensure that a similar incident does not happen again?”

In the event that such a marine incident occurs, the Master of the vessel at the time may have his/her Authority to Master a Rescue Vessel suspended as soon as practical, pending the outcome of the investigation by the Squadron Committee and or any other Authority which may have cause to become involved.

This suspension MUST remain in force until such disciplinary and or remedial action has been effected, to the satisfaction of the Association and or Authorities.

CONSTRUCTION, SAFETY EQUIPMENT & FIT OUT.

The following details the minimum construction standard for and safety equipment to be carried on all VMRAQ Rescue Vessels when engaged in operational activities. This equipment includes the mandatory equipment specified in the Marine Safety Act and Regulations and other equipment considered necessary by VMRAQ to ensure, to the best of our ability, the safe operations of VMRAQ vessels and the safety of the crew.

Any construction standard and or safety equipment that is required to be carried and or met under this standard MUST be in a serviceable condition and where appropriate MUST meet any manufacturers requirements for inspection, servicing and or replacement. Any vessel that does not meet the required standards and or carries safety equipment that is not serviceable or is outside of the manufacturers requirements shall be regarded as not meeting and or carrying that standard or equipment.

Notes:-

1. Notwithstanding anything contained in this Policy Document; it is the legal responsibility of the Master of the vessel, to the best of his ability under the Marine Safety Act and Regulations, to ensure that all required standards for construction have been met and all safety equipment is carried on board the vessel and is in a serviceable condition.
2. For smaller vessels which are built for and have specific operational purposes, the following standards may be varied. These variations with respect to safety equipment required to be carried shall be determined in consultation with the State Training Officer, VMRAQ, and formally approved by Qld Transport in respect of the area and type of operation to be undertaken.
3. Being built "In Survey" does not guarantee a vessel is suitable for Rescue work. In Fit Out consideration must always be given so that the operation of equipment is within the capability of VMRAQ crews.
4. All vessels must comply with OH&S noise levels. (Max 85 db)
5. VMRAQ policy is, '*inboard diesels will NOT be considered other than in exceptional circumstances*'. For consideration, a Squadron must submit a proposal setting out a long term and sustainable maintenance program, including fund raising arrangements to meet the costs.

CLASS 2C OFFSHORE

Classification: Max 12 Metre

Note: Recommended length to be determined by VMRAQ in consultation with the boat builder and the VMRAQ Marine Engineer/Surveyor.

Construction:

Designed and built as a minimum to USL Class 2C, 2010 NSCV Restricted Offshore and to Q.D.O.T. Survey requirements.

Note: All Certificates of Compliance will be required from the Ship Builder in relation to the capabilities of the ship to meet the work requirements with regard operational conditions as set out in the specification and to enable registration of the vessel as required under the Qld Transport, Marine Safety Act and Regulations.

FIT OUT:-

General: As Appropriate

- * Registration USL Class 2C 2010 NSCV
- * 1 x Anchor and Lines
- * Life Raft with EPIRB

Note: As a Minimum a life raft in a valise is mandatory for larger vessels with extended offshore capability where limited assistance is available.

- * Fixed Side Fenders
- * Bulwark Door/s
- * Seating with foot rests
- * Screen Wipers & Washers (Dual Remote Switching)
- * Cabin / Wheelhouse Hand Rails
- * Fore & Aft Deck Hand Rails
- * Side Cabin Hand Rails
- * 1 x Bilge Pumping System
- * Fuel Tanks & Capacity (Interconnecting Fuel System)
- * Steering System (Hydraulic / Locking Devices)
- * 1 x Towing D, Bravo & NUC Flag
- * 1 x N U C Lights (Portable)
- * Hatches
- * Deck Bollards
- * Towing Bollard/s - Post
- * 1 x Flagstaff
- * Rope & Anchor Lockers
- * Non Skid Decks & Gunwales
- * Self Draining Decks
- * Ships Log Book
- * 1 x Ships Clock
- * 1 x Horn (Sounding Device / Fixed or Hand Held)
- * Fresh water tank.
- * 1 x Barometer (Area Dependant)
- * 1 x Set Cabin Cooling Fans
- * 1 x Toilet
- * 1 x Sink & Shower
- * 1 x Micro Wave & Inverter

Power & Lighting: - (All lights to be LED where possible)

- * Navigation Lights
- * Towing Lights
- * Deck Lighting
- * Cabin Lighting (Red White)
- * D.C. Power Outlets
- * 1 x Mobile Spot Light (May be the signalling light)
- * Circuit Breaker Control Panel (Labelling)
- * 3 x Min Batteries
1 per Motor - 1 Communications - 1 House Power - Diode Protected Charging System
- * Shore Power
- * 2 x Fixed Spot Light/s (Remote / Manual Controlled)
- * 1 x FLIR System
- * 2 x Orange Strobe Lights

Life Saving - Safety Equipment:-

- * Storage Compartment Labelling
- * 1 x Boat Hook
- * Coastal Life Raft as per survey
- * Coastal Life Jackets
- * 1 x Signalling Mirror
- * 2 x Waterproof Torches
- * 1 x Life Buoy (With Light)
- * 1 x Medical Kit
- * Fire Extinguishers
- * Fire Buckets (1 under 10m / 2 over 10m)
- * 1 x Bilge Pump (As Required) (See Bilge Pump - Specification)
- * 1 x EPIRB
- * 3 x Parachute Distress Rockets
- * 2 x Red Hand Flares
- * 1 x Orange Smoke Signal
- * 1 Waterproof Container
- * 1 x Sea Anchor
- * 2 x Safety Harnesses
- * Gas Detection System

Communications Equipment: -

- * 2 x VHF Radios
- * 1 x H F Radio (Operationally Dependant)
- * 1 x Mobile or Satellite Phone (Installation Only)
- * 1 x AM/FM CD Radio
- * P. A. System (Optional)

Navigation Equipment: -

- * 1 x Compass
- * 1 x Hand Held Compass
- * 1 x G P S
- * 1 x Depth Sounder
- * 1 x Radar
- * 1 x Charts
- * 1 x Day Shapes

Optional:

- * 1 x Auto. Pilot (As Appropriate)
- * 1 x Anchor Winch. (As Appropriate)

Propulsion Machinery: -

- * 2 x Motors (Maximum Speed 40 Knots)
- * Engine Protection Rails
- * Racor Fuel Filters with clear water traps

Note: Engine combinations and sizes shall not exceed that recommended by the boat builder and confirmed by the VMRAQ appointed Marine Engineer/Surveyor in line with the following criteria:-

“The vessel shall be used in (state area of operations) in varying conditions and mastered and manned by personnel who have limited maritime experience and who do a duty approximately once per month and in some cases less”.

Instruments:

- * As supplied by the engine manufacturer.
- * Hour Meters
- * Volt Meters (House Power)

Optional:

- * Fuel Management System / Gauges (If not an integral part of engine system)

Documentation:

- * Ships Record Book as per legislation.

Trailer:

- * Trailer or Trolley (As Appropriate)

CLASS 2D & 2E PARTIALLY SMOOTH & SMOOTH WATERS

Classification: Max 7 Metre

Construction:

Designed and built as a minimum to USL Class 2C, 2010 NSCV Restricted Offshore and to Q.D.O.T. Survey requirements.

Note: All Certificates of Compliance will be required from the Ship Builder in relation to the capabilities of the ship to meet the work requirements with regard operational conditions as set out in the specification and to enable registration of the vessel as required under the Qld Transport, Marine safety Act and Regulations.

FIT OUT: - Determined upon application.

NOTE:

1. It is considered that the registration of any VMRAQ Rescue Vessel in USL Class 2 E would be a superfluous exercise, except in exceptional circumstances.
2. Requirements for USL Class 2 D are in the main similar to USL Class 2 C, 2010 NSCV given that in most areas the potential to transgress from Partially Smooth to Offshore waters in a SAR situation is more than probable.
3. It is understood that smaller vessels other than those above are in fact utilised in specific circumstances in Partially Smooth and Offshore situations. Whilst construction standards are mandatory, fit out of these vessels is negotiable with respect to specific operational requirements and circumstances. However, crew safety is always paramount in these considerations and final approval is required by Q.D.O.T. in conjunction with V.M.R.A.Q.

NOTE WELL:-

It should be kept in mind, when considering registration requirements, that you may NOT exceed Master Licence and or Registration Restrictions with respect to area of operation except in a SAR emergency situation and even then to do so, you may render yourself liable in the event of any mishap.