

**Statement of Requirements:
Supply of New Lifeboat and Davit Systems for CCGS
George R. Pearkes and CCGS Ann Harvey**

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Part 1: Scope:

- 1.1** The intent of this Statement of Requirements (SOR) is for the contractor to supply two (2) lifeboats complete with davits to replace the existing lifeboat and davit systems currently fitted individually on the Canadian Coast Guard Ship (CCGS) Ann Harvey and CCGS George R. Pearkes.
- 1.2** The contractor shall also provide the unit cost to supply two (2) additional lifeboat and davit systems of the same model for additional Canadian Coast Guard (CCG) vessels for a twenty four (24) month period beginning at the contract award date of the first units. Pending CCG approval, additional lifeboat and davit systems systems that may be supplied for this particular SOR would be intended individually for the following vessels:
 - 1.2.1.** CCGS Sir Wilfred Laurier
 - 1.2.2.** CCGS Martha Black
- 1.3** All references to Class approval within this specification are defined as approval by one of the Recognized Organizations (RO) approved by Transport Canada within the Delegated Statutory Inspection Program (DSIP).
- 1.4** Proposed lifeboat and davit systems must currently be in marine service and shall have Original Equipment Manufacturer (OEM) representation in Canada. The manufacturer's appointed service organization shall hold a stock of essential spares and be capable of providing qualified field service representatives (FSRs), thorough component documentation support, and the capability to provide technical support for standard overhaul as well as repair .The service organization shall be capable of delivering these services and parts to St. John's, NL, Victoria, BC and Quebec City, QC, within 48 hours of notification by the CCG.
- 1.5** Specific delivery locations and language requirements of any additional units availed of by contractual options will be determined by each particular purchase at the time of an approved procurement. Locations for potential subsequent purchases include Quebec City, QC (in this case French language) and Victoria BC(in this case English language).
- 1.6** The contractor shall be capable of supervising the installation and commissioning of these systems to be carried out in future refits with undetermined dates at the time of solicitation, however note that installation and commissioning costs are not associated with SOR as the intent is for supply only at this time. For quotation purposes only the contractor shall include the estimated unit cost per vessel for installation, training and commissioning however these costs will be incorporated in future contracts if the options are exercised.
- 1.7** The contractor shall be capable of provide two (2) sets of training courses to be held onboard each vessel after commissioning of each lifeboat and davit system. Note that training costs will be associated with installation costs as stated in paragraph 1.6 and therefore are this cost is not associated with this SOR. Each course shall be for up to 12 students for 4 hours. These courses shall be conducted by the Contractor's technical representative and shall as a minimum provide:
 - 1.7.1** Overview of lifeboat and davit systems.
 - 1.7.2** Overview of lifeboat and davit systems system functionality and capability.

1.7.3 Launch recovery and safe operation.

1.7.4 Routine maintenance.

1.7.5 Trouble shooting methods.

Part 2: Bid Submission Package

- 2.1** The bidder shall supply a list of at least five (5) marine installations within the last ten (10) years with lifeboat and davit systems which consist of the same or very similar equipment as proposed for the CCGS Ann Harvey and CCGS George R. Pearkes.
- 2.2** The bidder shall provide drawings for CCGS Ann Harvey and CCGS George R. Pearkes showing the proposed lifeboat and davit systems fitting within the dimensional area required for installation.in electronic format compatible with AutoCAD for each ship. A drawing has been appended.
- 2.3** The bidder shall supply one copy of the following:
 - 2.4.1.**Technical data listed in Part 6.
 - 2.4.2.**Regulatory Compliance documentation with reference to Part 3.
 - 2.4.3.**Manufacturer's published maintenance schedule for the equipment comprising the proposed lifeboat and davit systems.
 - 2.4.4.** Manufacturer's published sales brochure for the proposed equipment comprising the lifeboat and davit systems.
 - 2.4.5.**Field Service rates at the time of solicitation for budgetary purposes.

Part 3: Standards

The requirements of the following standards shall be complied with in supplying the lifeboat and davit systems. Current editions of documents at the time of solicitation shall be used.

- 3.1** International Maritime Organization (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL).
- 3.2** Canada Shipping Act, 2001 (CSA 2001).
- 3.3** Classification Society Rules and Regulations for the Classification of Ships
- 3.4** International Convention for the Safety of Life at Sea (SOLAS)
- 3.5** Life Saving Appliances(LSA) Code
- 3.6** Marine Machinery Regulations.
- 3.7** Transport Canada Marine Safety (TCMS) Ship Safety Electrical Standard TP-127e.
- 3.8** TCMS TP7320E
- 3.9** TCMS, TP 7323E
- 3.10** IP Code, International Protection Marking, IEC standard 60529.
- 3.11** International Electrotechnical Commission.

Part 4: Technical Description:

- 4.1 New davits shall fit within existing davit footprint for attachment to the vessel. The contractor shall perform a site visit to the vessel in St. John's, NL to confirm the proposal is adequate for CCGS George R. Pearkes and CCGS Ann Harvey's installations. Both vessels are available for viewing up to and including Oct.26th 2016.
- 4.2 New davits must not impede access or otherwise block passage around and under the davit. Passage shall be maintained under the davit and lifeboat as per currently fitted arrangement.
- 4.3 Davit and launching devices shall be capable of operating with a list or trim in either direction as per regulations.
- 4.4 Davit and lifeboat system shall be capable of being lowered and released from the stowed position on the vessel in compliance with regulations with full complement of 60 persons.
- 4.5 The davit shall be provided with one layer of primer and 2 topcoats of white.
- 4.6 The davit shall have the ability to be launch and recover the lifeboat locally and remotely.
- 4.7 The davit lifting arrangement and lifeboat hooking arrangement shall be fully compatible.
- 4.8 The davit shall be electro-hydraulic and shall have all major electric and hydraulic components housed internally for protection from water, ice and debris. The internally housed electric and hydraulic components shall be provided with inspection covers for access and maintenance. Inspection cover fasteners shall be stainless steel.
- 4.9 The davit shall be constructed complete with all parts necessary to perform its full function to launch and recover the lifeboat through all modes of operation.
- 4.10 The davit shall have a lashing arrangement provided.
- 4.11 The davit shall be provided with a 2 speed electric/hydraulic driven winch.
- 4.12 Davit winch motors shall match existing voltage (600V).
- 4.13 Lifeboat shall be totally enclosed and with a capacity for 60 persons.
- 4.14 Lifeboat shall be rigid hull constructed of fire retardant glass fibre reinforced polyester material. (GRP). This material shall be resistant to rot, corrosion, seawater, oil, fungus and sunlight and deterioration from air temperature in the range of -20 degrees C to + 65 degrees C.
- 4.15 Lifeboat shall be fitted with an internal cabin heater.
- 4.16 Lifeboat shall be fitted with a rubber fender protecting the exterior hull, fender fasteners shall be stainless steel.
- 4.17 The lifeboat shall be fitted with buoyant grab lines on the exterior hull.
- 4.18 The lifeboat shall be fitted with a hull drain complete with plug.
- 4.19 Lifeboat exterior hull and exterior canopy shall be of gel coat resin of international orange colour.
- 4.20 Lifeboat interior hull and interior canopy shall be painted in light grey colour.
- 4.21 Lifeboat exterior hull shall have the vessel's name, port of registry and number of persons marked on the port and starboard bow.

- 4.22** Lifeboat shall have retro-reflective tape markers affixed to the top, bottom and sides of the exterior hull.
- 4.23** Lifeboat shall have the vessel's call sign marked on the top of the canopy.
- 4.24** Lifeboat shall be fitted with anti-skid on all interior and exterior walking surfaces.
- 4.25** Lifeboat propulsion unit shall consist of the following:
 - 4.25.1.** Prime mover shall be an inboard compression ignition engine with engine pre-heater and dual electric start. Engine shall be capable of running in any position in the event of capsized and continue to run after uprighting.
 - 4.25.2.** Engine exhaust piping and exhaust silencer shall be insulated in a heat insulating material.
 - 4.25.3.** Engine instrument panel shall have controls for engine start/stop, alternator output, high jacket water temperature alarm and low lube oil pressure alarms.
 - 4.25.4.** The lifeboat engine fuel oil tank shall be constructed of stainless steel with a capacity to run the fully loaded boat at full speed for at least 24 hours. The vent line for the fuel tank shall have an outlet mounted on the exterior of the lifeboat. The outlet shall be fitted with a spark arrester.
 - 4.25.5.** Reversible transmission controlled from the helmsman's position.
 - 4.25.6.** Propeller shaft supported in bearings with sealing arrangement.
 - 4.25.7.** Bronze propeller.
 - 4.25.8.** Lifeboat engine starting methods shall comply with regulations.
 - 4.25.9.** Lifeboat engine cooling system to be fresh water/antifreeze keel cooled
- 4.26** Lifeboat shall be fitted with a ventilator that can be manually closed.
- 4.27** Lifeboat shall be fitted with a steering system controlled from the helmsman's position. The steering system shall be fitted with a tiller for emergency steering.
- 4.28** Lifeboat shall be provided with a battery charger. Batteries shall be capable of receiving a charge from the a vessel power source as well as from the inboard engine alternator.
- 4.29** Lifeboat batteries shall be maintenance free, stored in approved containers, vented outside and shall have independent switches.
- 4.30** The lifeboat shall have an identification plate affixed to the interior hull with the following information provided; serial number, dimensions, date of manufacture, date of inspection, number of persons and weight capacity.
- 4.31** The lifeboat shall have the following electrical equipment included; canopy light, handheld search light, position indicating light, illuminated compass. The switch panel containing the circuits for these devices shall be protected with fuses.
- 4.32** The lifeboat shall be supplied with a bilge pump.
- 4.33** The lifeboat shall be supplied with a full stock of standard life saving appliances and equipment as per regulations; these shall be stored in clearly marked storage cabinets. The storage cabinets shall be constructed within the interior of the lifeboat.

Part 5. Quality Assurance

- 5.1** The lifeboat and davit systems shall be tested in accordance with regulatory requirements. Factory Acceptance Testing (FAT) procedures shall be carried out at the manufacturer's facility.
- 5.2** The CCG Technical Authority(TA) shall witness the FAT

- 5.3** Two (2) typewritten copies of all above-noted test data shall be provided to the CCG TA prior to acceptance.

- 5.4** After the tests are complete, the lifeboat and davit systems shall be crated, stored and prepared for delivery as per manufacturer's recommendations to the location stated for each purchase.

Part 6: Deliverables

6.1 The following technical data shall be supplied for the lifeboat and davit systems; the documentation shall be supplied in two (2) typewritten and two (2) electronic copies in Adobe PDF documents.

6.1.1.Material list.

6.1.2.Operation, service and parts manuals.

6.1.3.Equipment drawings.

6.1.4.Mounting dimensions.

6.1.5.Electrical wiring diagrams.

6.1.6.Individual weights of the lifeboats davits and associated equipment. .

6.1.7.Original and two (2) copies of Class Approval certificates

6.1 The contractor shall provide all mechanical and electrical spares required to perform two (2) years of the recommended regularly scheduled maintenance. The required spares shall be genuine OEM parts as published in the manufacturer's maintenance manual.

6.2 The contractor is to provide a list of manufacturer recommended spares for a fifteen (15) year lifespan as published in the manufacturer's maintenance manual. The list shall include part numbers, lead-time to order, retail prices at time of bid submission with a list of Canadian distributors and service centres.

6.3 The contractor shall provide two (2) paper copies and two (2) electronic copies per lifeboat and davit systems of the manufacturer's operation, service and repair manuals (including maintenance schedules) and parts manuals. Electronic documents shall be supplied within sixty (60) days of award of contract and be Adobe PDF. Electronic files shall have a resolution no less than 300 dpi, be manufacturer approved and retain the colours of the original documents.

6.4 Delivery of the new lifeboat and davit systems. is required by Jan. 31.2017 at the contractor's storage facility within 50 km of St. John's, NL Additional locations will depend on specific requirements made prior to purchase options. The bidder shall quote as a separate price for budgetary purposes only the cost to provide heated storage of the systems at the supplier's facility.

Part 7: Warranty

- 7.1** The supplier shall provide a minimum of one (1) year warranty from the date at which each lifeboat and davit system becomes operational. The operational date is anticipated to commence within eight (8) months of the date of delivery.
- 7.2** For the purpose of the installations the various components may need to be separated and subsequently reassembled. If separation and reassembly is required this practice shall not void the manufacturer's warranty.
- 7.3** Supplier must indicate if warranty requires Field Service Representative installation and commissioning.