Public Works and Government Services Canada | Travaux publics et Services gouvernementaux Canada

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:

Bid Receiving - PWGSC / Réception des soumissions - TPSGC
11 Laurier St. / 11, rue Laurier
Place du Portage , Phase III
Core 0B2 / Noyau 0B2
Gatineau
Québec
K1A 0S5
Bid Fax: (819) 997-9776

REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

Proposal To: Public Works and Government Services Canada

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

Proposition aux: Travaux Publics et Services Gouvernementaux Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Title - Sujet
One 8.75- 9.25m GRP RHIB w. TRAILER

Solicitation No. - N° de l'invitation	**Date**
F7044-170071/A	2018-03-06

Client Reference No. - N° de référence du client
F7044-170071

GETS Reference No. - N° de référence de SEAG
PW-$$MC-032-26746

File No. - N° de dossier	**CCC No./N° CCC - FMS No./N° VME**
032mc.F7044-170071	

Solicitation Closes - L'invitation prend fin
at - à 02:00 PM
on - le 2018-04-18

Time Zone
Fuseau horaire
Eastern Daylight Saving Time EDT

F.O.B. - F.A.B.
Plant-Usine: ☐ **Destination:** ☑ **Other-Autre:** ☐

Address Enquiries to: - Adresser toutes questions à:	**Buyer Id - Id de l'acheteur**
Girard, Luc J.	032mc

Telephone No. - N° de téléphone	**FAX No. - N° de FAX**
(819) 420-2890 ( )	( ) -

Destination - of Goods, Services, and Construction:
Destination - des biens, services et construction:

Specified Herein
Précisé dans les présentes

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Delivery Required - Livraison exigée	**Delivery Offered - Livraison proposée**
See Herein	

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Telephone No. - N° de téléphone
Facsimile No. - N° de télécopieur

Name and title of person authorized to sign on behalf of Vendor/Firm (type or print)
Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)

Signature **Date**

Issuing Office - Bureau de distribution
Ship Construction, Refit and Related Services/Construction navale, Radoubs et services connexes
11 Laurier St. / 11, rue Laurier
6C2, Place du Portage
Gatineau
Québec
K1A 0S5

Canada

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PART 1 - GENERAL INFORMATION

1.1 Introduction

The bid solicitation is divided into seven parts plus attachments and annexes, as follows:

Part 1 General Information: provides a general description of the requirement;

Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;

Part 3 Bid Preparation Instructions: provides Bidders with instructions on how to prepare their bid;

Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;

Part 5 Certifications and Additional Information: includes the certifications and additional information to be provided;

Part 6 Security, Financial and Other Requirements: includes specific requirements that must be addressed by Bidders; and

Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Technical Statement of Requirement, the Basis of Payment, the Insurance Requirements, the Bidder's Questions and Canada Responses, Subcontractors, the Inspection/Quality Assurance/Quality Control, and any other annexes.

1.2 Summary

1.2.1 The Department of Fisheries and Oceans Canada has a requirement for one 8.75m to 9.25m Glass Reinforced Plastic (GRP) Rigid Hull Inflatable Boat (RHIB) with cabin and trailer built in accordance with the Technical Statement of Requirement (TSOR) at Annex A and the Bidder's Questions and Canada Responses at Annex D, and with options to purchase up to two additional GRP RHIB's with trailers.

All deliverables must be delivered to Fisheries and Ocean Canada in Mont-Joli, Québec by October 25, 2018.

1.2.2 The requirement is subject to the provisions of the North American Free Trade Agreement (NAFTA) and the Canadian Free Trade Agreement (CFTA).

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2017-04-27) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

2.1.1 *SACC* Manual Clauses

A9125T (2007-05-25), Valid Labour Agreement
B1000T (2014-06-26), Condition of Material – Bid
B3000T (2006-06-16), Equivalent Products

2.2 Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

Due to the nature of the bid solicitation, bids transmitted by facsimile to PWGSC will not be accepted.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 14 calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as “proprietary” will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

2.5 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least 14 days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Due to the nature of the bid solicitation, bids transmitted by epost Connect service and by facsimile will not be accepted.

Canada requests that Bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid, two hard copies
Section II: Management Bid, two hard copies
Section III: Financial Bid, one hard copy
Section IV: Certifications, one hard copy

Prices must appear in Section III, financial bid only.

(a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
(b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement (http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html). To assist Canada in reaching its objectives, Bidders should:

1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and

2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

3.2 Section I: Technical Bid

In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth **the points that are subject to the evaluation criteria** against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

3.2.1 Proposed Vessel

The proposed Vessel must be built from the Proven Hull Design (3.3.1). The Proposed Vessel is defined as the vessel described in the TSOR.

Bidders must submit Drawings, Calculations and Reports for the Proposed Vessel that are in accordance with the TSOR and include at a minimum, the following information:

a) general arrangement drawings;
b) detailed lines plan;
c) structural drawings showing deck plan, centerline profile and frame station construction details;
d) calculated lightship weight;
e) draft stability calculation of the proposed vessel; and
f) drawing of the fuel supply arrangement.

3.3 Section II: Management Bid

In their management bid, Bidders must describe their capability and provide all documentation/information as requested in the following articles.

3.3.1 Proven Vessel Design

3.3.1.1 Bidders must provide a Proven Vessel Design. Proven Vessel Design is defined as a marine vessel design that has been built and in service, at least two (2) vessels within the past seven years and within the parameters of size, type and complexity stated below.

For the purposes of this section 3.3.1.1, the terms similar size, type and complexity are defined as:

Similar size: 7m to 11m in Length Over All (LOA)
Similar type and complexity: GRP hull

Bidders must provide the following documentation for a minimum of two vessels built on the Proven Vessel Design;

(a) If the Proven Vessel Design was built and registered in Canada or the United States, the bidder must provide:
- general arrangement drawings;
- Hull Identification Number (HIN), Transport Canada; and /or
- Manufacturers Identification Code (MIC), United States Coast Guard.

(b) If the Proven Vessel Design was built but registered outside of Canada or the United States, the bidder must provide:
- general arrangement drawings; and
- completed and signed Form 2 Reference.

3.3.1.2 Bidders must certify that they have the rights to use the Proven Vessel Design in order to manufacture the vessel(s) for Canada in accordance with Annex A – TSOR.

Bidders must complete and submit as part of their Bid Annex “G”, Form 1 – Intellectual Property Rights Certification for the Proven Vessel Design.

3.3.2 Vessel Construction Experience

Bidders must provide documentation for a minimum of two different vessels of similar size, type and complexity that have been manufactured by the Bidder, at the Bidder's facility within the last seven years.

For the purposes of this section 3.3.2, the terms similar size, type and complexity are defined as:

Similar size: 7 m to 15 m in Length Over All (LOA)

Similar type and complexity: GRP hull

Documentation that must be submitted for each manufactured vessel must include:

(a) If the manufactured vessel was built and registered in Canada or the United States, the bidder must provide:

- general arrangement drawings;
- Hull Identification Number (HIN), Transport Canada; and /or
- Manufacturers Identification Code (MIC), United States Coast Guard.

(b) If the manufactured vessel was built but registered outside of Canada or the United States, the bidder must provide:

- general arrangement drawings; and
- completed and signed Form 3 Reference.

3.3.3 Marine Drafting and Engineering Capability

The Bidder must provide objective evidence that it has either in-house capabilities, or has a written commitment for the duration of the Contract from a supplier to provide marine drafting and engineering services. The bidder or subcontractor must have the marine drafting and engineering experience and capabilities on construction projects for boats of similar size and type to the boats subject to this RFP.

For the purposes of this evaluation, the terms similar size, type and complexity are defined as:

Similar size: 7m to 15m in Length Over All (LOA)

Similar type and complexity: GRP hull experience

3.3.4 Contractor Quality Management System

1. The Bidder must provide objective evidence that it has a Quality Assurance Program, which must be in place during the performance of the Work, and should address the quality control elements below.

2. The objective evidence may be in the form of a copy of the Bidder's Quality Assurance Manual which should address these elements. Proof of registration with a recognized quality assurance organization whose system should address the minimum requirements below, may be submitted for consideration.

3. The Bidder must also provide a minimum of one (1) sample of completed quality records used on the most recent marine vessel construction at its facility.

4. The quality control elements should, as a minimum, be:

- Management Representative
- Quality Assurance Manual
- Quality Assurance Program Descriptions
- Quality Reporting Organization
- Documentation
- Measuring and Testing Equipment
- Procurement
- Inspection and Test Plan
- Incoming Inspection
- In-Process Inspection
- Final Inspection
- Special Processes
- Quality Records
- Non Conformance
- Corrective Action

5. Bidder facilities may be audited by Canada, or its authorized representative, prior to award of contract to ensure that a system is in place in accordance with the foregoing requirement.

6. The Contractor will be required to submit completed quality assurance documentation with each claim for payment, as applicable.

3.3.5 Inspection and Test Plan (ITP)

Bidders must provide with their bid the inspection plan and testing procedures that will be used to verify, test and inspect all of the components and systems on the boat from initial construction to completion. The ITP must be in accordance with **Annex F** attached to this RFP.

Bidders must outline the process by which they will address and solve problems or delays with the fabrication, installations, testing and delivery of the boat.

3.3.6 Preliminary Project Schedule

1. As part of its bid, the Bidder must provide its preliminary project schedule, in MS Project format or equivalent. The project schedule must include the Bidder's work breakdown structure, the scheduling of main activities and milestone events, and any potential problem areas involved in completing the Work.

2. The Bidder's schedule must also provide a target date for each of the following significant events as applicable:

   (a) hull materials delivered to Contractor and sustained construction commenced;

   (b) hull and deck completed, but not closed in to allow for full inspection of the structure and welding.

   The Contractor will be required to supply a hard copy of the material certs and construction drawings to the Technical/Inspection Authority one week prior to inspection by the Technical/Inspection Authority;

   (c) outfitting/electrical 75% complete but all equipment and components delivered to the Contractor and available for full inspection. The Contractor will be required to supply a hard copy of the list of

equipment and electrical supplies to the Technical/Inspection Authority one week prior to inspection by the Technical/Inspection Authority;

(d) technical manuals delivered to Canada for approval (no less than 14 days prior to the planned delivery date);

(e) Contractor's tests and trial and final sea trials required by the TSOR;

(f) boat and trailer delivered to Canada for approval;

Note: Technical Manuals will not be returned once approved.

3.3.7 Subcontractors

A list in the form of completed Annex E Subcontracts must be included with the Bidder's Proposal in accordance with article 06 (2013-06-27) Subcontracts of the 2030 General Conditions unless, it is specifically requested in the requirement then the subcontract information must be provided.

3.4 Section III: Financial Bid

3.4.1 Firm Prices

Bidders must submit their financial bid in accordance with Annex B, Basis of Payment.

The prices in Table "B" Priced Options and Hourly Rates of Non-Scheduled Work requested in Annex B must be provided but will not be included in the bid evaluation.

3.4.2 Exchange Rate Fluctuation

C3011T *(2013-11-16)*, Exchange Rate Fluctuation

3.5 Section IV: Certifications

3.5.1 Bidders must submit the certifications and additional information required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

(a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical, management & financial evaluation criteria.

(b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

4.1.1.1. Mandatory Technical Criteria

In order to be compliant, Bidder's proposal must, to the satisfaction of Canada, meet all requirements and provide all information as requested in PART 3 - BID PREPARATION INSTRUCTIONS, 3.2 Section I - Technical Bid, **article 3.2.1 Proposed Vessel.**

4.1.2 Management Evaluation

4.1.2.1 Mandatory Management Criteria

In order to be compliant, Bidder's proposal must, to the satisfaction of Canada, meet all requirements and provide all information as requested in PART 3 - BID PREPARATION INSTRUCTIONS, **3.3 Section II – Management Bid.**

4.1.3 Financial Evaluation

4.1.3.1 Mandatory Financial Criteria

In order to be compliant, Bidder's proposal must, to the satisfaction of Canada, meet all requirements and provide all information as requested in PART 3 - BID PREPARATION INSTRUCTIONS**, 3.4 Section III – Financial Bid.**

4.1.3.2 Evaluation of Price

A0220T (2014-06-26), Evaluation of Price - Bid

4.2 Basis of Selection

4.2.1 Mandatory Technical, Management and Financial Criteria

A bid must comply with the requirements of the bid solicitation and meet all mandatory “technical”, “management” and “financial” evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

The requested prices in Table 2 Priced Options and the unscheduled work rates from Annex “B” Basis of Payment must be included, however they will not form part of the evaluation.

A mandatory requirement is described using the words "shall", "must", "will" "is required" or "is mandatory".

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder’s certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the Integrity declaration form available on the Forms for the Integrity Regime website (http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html), to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of the Ineligibility and Suspension Policy (http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the Employment and Social Development Canada (ESDC) - Labour's website (https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the “FCP Limited Eligibility to Bid list at the time of contract award.

5.2.3 Additional Certifications Precedent to Contract Award

5.2.3.1 Workers Compensation Certification – Letter of Good Standing

The Bidder must have an account in good standing with the applicable provincial or territorial Workers' Compensation Board.

The Bidder must provide, **within five calendar days** following a request from the Contracting Authority, a certificate or letter from the applicable Workers' Compensation Board confirming the Bidder's good standing account. Failure to comply with the request may result in the bid being declared non-responsive.

5.2.3.2 Welding Certification

1. Welding must be performed by a welder certified by the Canadian Welding Bureau and in accordance with the requirements of the following standards:

   (a) CT-043-EQ-EG-001-E, Canadian Coast Guard Welding Specification, August 2017;

(b) CSA W47.2-11, Certification of Companies for Fusion Welding of Aluminum, division 2.

2. Before contract award and within five calendar days of the written request by the Contracting Authority, the successful Bidder must submit evidence demonstrating its certification to the welding standards.

PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

6.1 Security Requirements

There is no security requirement associated with this bid solicitation.

6.2 Financial Capability

SACC Manual clause A9033T, (2012-07-16), Financial Capability

6.3 Insurance Requirements

The Bidder must provide a letter from an insurance broker or an insurance company licensed to operate in Canada stating that the Bidder, if awarded a contract as a result of the bid solicitation, can be insured in accordance with the Insurance Requirements specified in Annex C Insurance Requirements.

If the information is not provided in the bid, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid nonresponsive.

PART 7 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

7.1 Requirement

The Contractor must provide The Department of Fisheries and Oceans Canada one 8.75 – 9.25m Glass Reinforced Plastic (GRP) Rigid Hull Inflatable Boat (RHIB) with cabin and trailer in accordance with the Technical Statement of Requirement (TSOR) at Annex A and the Bidder's Questions and Canada Responses at Annex D.

7.1.1 Optional Goods

The Contractor grants Canada the irrevocable option to acquire up to two additional GRP RHIB's with cabin and trailer under the same conditions and at the prices stated in the Contract.

The Contracting Authority may exercise the option at any time up to one year after the delivery date of the initial GRP RHIB and trailer by sending a written notice to the Contractor.

7.2 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

7.2.1 General Conditions

2030 (2016-04-04), General Conditions - Higher Complexity - Goods, apply to and form part of the Contract.

7.2.2 Supplemental General Conditions

1028 (2010-08-16), Ship Construction – Firm Price, apply to and form part of the Contract.

Warranty

The Supplemental General Conditions 1028, article 12 – Warranty, paragraph 3 is deleted and replaced with the following:

The warranty period for the propelling machinery and auxiliaries, fittings and equipment of all kinds (excluding GSM) is twelve (12) months and the warranty period for the hull is 24 months from the date of delivery and acceptance by Canada.

7.3 Security Requirements

7.3.1 There is no security requirement applicable to the Contract.

7.4 Term of Contract

7.4.1 Period of the Contract

The period of the Contract is from date of Contract to June 25, 2020 inclusive.

7.4.2 Delivery Date

All the deliverables must be received on or before October 25, 2018.

7.4.3 Delivery Point

Delivery must be made to The Department of Fisheries and Oceans Canada, Institut Maurice Lamontagne, 850 Route de la Mer, Mont-Joli, Québec, G5H 3Z4.

7.5 Authorities

7.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Luc Girard
Supply Specialist
Public Works and Government Services Canada
Acquisitions Branch

Marine Systems Directorate
Portage III - Floor: 6C2
11, rue Laurier, Gatineau (Québec), K1A 0S5 Canada
Luc.Girard@tpsgc-pwgsc.gc.ca
Téléphone : 819-420-5807
Télécopieur/Facsimile : 819-956-6648

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

7.5.2 Technical Authority *to be provided at contract award*

The Project Authority for the Contract is:

Name: _____
Title: _____
Organization: _____
Address: _____

Telephone: ___-___-_____
Facsimile: ___-___-_____
E-mail address: _____

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority; however, the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

7.5.3 Inspection Authority *to be provided at contract award*

The Inspection Authority for the Contract is:

_____
_____

The Inspection Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for inspection of the Work and acceptance of the finished work. The Inspection Authority may be represented on-site by a designated inspector and any other Government of Canada Inspector who may from time to time be assigned in support of the designated Inspector.

7.5.4 Contractor's Representative
To be provided by bidder

_____
_____
_____

7.6 Payment

7.6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid the firm prices *as specified in Annex B for a cost of $____TBD_____* . Customs duties are *included* and Applicable Taxes are extra.

7.6.2 Limitation of Price

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

7.6.3 Payment for Fuels, Oils and Lubricants

The Contractor is responsible for the supply and cost of all fuel, lubricating oil, hydraulic oil and other lubricants sufficient for fully charging all systems as required for operating the machinery and other equipment and for performing all tests and trials.

7.6.4 Field Engineering and Supervisory Services

If Field Service Representatives (FSR) and/or Supervisory Services are required for the Work, the cost of all such services is to be included in the price for the Work.

7.6.5 Milestone Payments

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and the payment provisions of the Contract if:

(a) an accurate and complete claim for payment using PWGSC-TPSGC 1111, Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;

(b) all the certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives;

(c) all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

7.6.6 Schedule of Milestones

The schedule of milestones for which payments will be made in accordance with the Contract is as follows and will be applied per boat/trailer:

National Asset Code VXB83			
Milestone No.	Description of deliverable(s)	% of contract value	Firm Amount CDN $
A	Hull materials delivered to Contractor and sustained construction commenced	30	
B	Boat, Trailer and technical manuals delivered and accepted by Canada	67	

C	End of 12 month warranty period – Final acceptance	3	
	Total.	100	$

The milestones A, B and C shown above must be included and identified in all production schedules.

The payment for the delivery, **Milestone B** will be payable by Canada upon delivery of the boat, trailer and manuals and Acceptance by Canada, minus the holdback for double the total estimated value of any outstanding work items.

The holdback for outstanding work will be payable by Canada upon completion of the outstanding work and when the work is accepted by Canada.

The payment for completion of the twelve month warranty period, **Milestone C,** will be payable by Canada upon completion of the warranty period of the workboat, minus the total cost of any work undertaken by Canada to repair any defects subject to warranty.

7.7 Invoicing Instructions

1. The Contractor must submit a claim for payment using form PWGSC-TPSGC 1111, Claim for Progress Payment.

Each claim must show:

(a) all information required on form PWGSC-TPSGC 1111;
(b) all applicable information detailed under the section entitled "Invoice Submission" of the general conditions;
(c) the description and value of the milestone claimed as detailed in the Contract;
(d) Quality assurance documentation when applicable and/or as requested by the Contracting Authority.

2. The Goods and Services Tax or Harmonized Sales Tax (GST/HST), as applicable, must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no GST/HST payable as it was claimed and payable under the previous claims for progress payments.

3. The Contractor must prepare and certify one original and one (1) copy of the claim on form PWGSCTPSGC 1111, and forward it to the Contracting Authority identified under the section entitled "Authorities" of the Contract for appropriate certification after inspection and acceptance of the Work takes place.

4. The Contracting Authority will then forward the original of the claim to the Technical Authority for certification and onward submission to the Payment Office for the remaining certification and payment action.

5. The Contractor must not submit claims until all work identified in the claim is completed.

7.8 Certifications and Additional Information

7.8.1 Compliance

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing associated information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the associated information, or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

7.8.2 Welding

1. The Contractor must ensure that welding is performed by a welder certified by the Canadian Welding Bureau (CWB) in accordance with the requirements of the following standards:

(a) CT-043-EQ-EG-001-E, Canadian Coast Guard Welding Specification, August 2017;
(b) CSA W47.2-M1987, Certification of Companies for Fusion Welding of Aluminum.

2. In addition, welding must be done in accordance with the requirements of the applicable drawings and specifications.

3. Before the commencement of any fabrication work, and upon request from the Inspection Authority, the Contractor must provide approved welding procedures and/or a list of welding personnel he intends to use in the performance of the Work. The list must identify the CWB welding procedure qualifications attained by each of the personnel listed and must be accompanied by a copy of each person's current CWB welding certification.

7.8.3 Workers Compensation

The Contractor must maintain its account in good standing with the applicable provincial or territorial Workers' Compensation Board for the duration of the Contract.

7.8.4 Trade Qualifications

The Contractor must use qualified, certified (where applicable) and competent tradespeople and supervision to ensure a uniform high level of workmanship. The Contracting Authority may request to view and record details of the certification and/or qualifications held by the Contractor's tradespeople. This request should not be unduly exercised but only to ensure qualified tradespeople are on the job.

7.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the Province of Ontario.

7.10 Priority of Documents

If there is a discrepancy between the wordings of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

a) The Articles of Agreement;
b) The Supplemental General Conditions 1028 (2010-08-16), Ship Construction Firm Price;
c) The General Conditions 2030 (2016-04-04), Goods (Higher Complexity);
d) Annex A, Technical Statement of Requirement;

e) Annex B, Basis of Payment;
f) Annex C, Insurance Requirements;
g) Annex D, Bidder Questions and Canada Responses;
h) Annex E, Subcontractors;
i) Annex F, Inspection/Quality Assurance/Quality Control;
j) Annex G, Form 1 Intellectual Property Rights Certification PROVEN Design
k) The Contractor's bid dated _____.

7.11 Defence Contract

SACC Manual clause A9006C (2012-07-16), Defence Contract

7.12 Insurance Requirements

The Contractor must comply with the insurance requirements specified in Annex “C”. The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract.

The Contractor is responsible for deciding if additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any additional insurance coverage is at the Contractor's expense, and for its own benefit and protection.

The Contractor must forward to the Contracting Authority within ten (10) days after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. For Canadian-based Contractors, coverage must be placed with an Insurer licensed to carry out business in Canada, however, for Foreign-based Contractors, coverage must be placed with an Insurer with an A.M. Best Rating no less than “A-”. The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

7.13 Shipping Instructions - Delivery at Destination

Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP) Mont-Joli, Québec Incoterms 2000.

7.14 SACC Manual Clauses

B5007C - Procedures for Design Change or Additional Work, (2010-01-1)
B9035C - Progress Meetings, (2008-05-12)
C0711C - Time Verification, (2008-05-12)
D0018C – Delivery and Unloading, (2007-11-30)
D3015C - Dangerous Goods/Hazardous Products – Labelling and Packaging Compliance, (2014-09-25)
H4500C - Lien - Section 427 of the Bank Act, (2010-01-11)

7.15 Post Contract Award / Pre-Production Meeting

Within **three working days** of the receipt of the Contract, the Contractor must contact the Contracting Authority to determine the details of a pre-production meeting. The meeting will be held at the Contractor's plant. Cost of holding such pre-production meeting must be included in the price of the bid.

Please note that the travel and living expenses for Government Personnel will be arranged and paid for by Canada.

7.16 Project Schedule

1. The Contractor must provide an updated detailed project schedule in MS Project format or equivalent to the Contracting Authority and the Technical Authority **five days after award of Contract.**

2. This schedule must highlight the specific dates for the events listed below.

   (a) hull materials delivered to Contractor and sustained construction commenced;
   (b) hull and deck completed, but not closed in to allow for full inspection of the structure and welding. The Contractor must supply a hard copy of the material certs and construction drawings to the Technical/Inspection Authority one (1) week prior to inspection by the Technical/Inspection Authority;
   (c) outfitting/electrical 75% complete but all equipment and components delivered to the Contractor and available for full inspection. The Contractor must supply a hard copy of the list of equipment and electrical supplies to the Technical/Inspection Authority one (1) week prior to inspection by the Technical/Inspection Authority;
   (d) technical manuals delivered to Canada for approval (no less than 14 days prior to the planned delivery date);
   (e) Contractor’s tests and trial and final sea trials required by the TSOR;
   (f) boat and trailer delivered to Canada for approval;
   (g) the start and the end of the twelve (12) month warranty period.

   Note: Technical Manuals will not be returned once approved***.***

3. The schedule is to be regularly updated and available in the Contractor's office for review by Canada's authorities to determine the progress of the Work.

7.17 Progress Report

1. The Contractor must submit monthly reports on the progress of the Work in an electronic format to the Technical Authority and to the Contracting Authority.

2. The progress report must contain two (2) Parts:

PART 1: The Contractor must answer the following three questions:

   (i) is the project on schedule?
   (ii) is the project within budget?
   (iii) is the project free of any areas of concern in which the assistance or guidance of Canada may be required?

Each negative response must be supported by an explanation.

PART 2: A narrative report, brief, yet sufficiently detailed to enable the Technical Authority to evaluate the progress of the Work, containing as a minimum:

(i) a description of the progress of each task and of the Work as a whole during the period of the report. Sufficient sketches, diagrams, photographs, etc., must be included, if necessary, to describe the progress accomplished.

(ii) an explanation of any variation from the schedule.

7.18 Quality Management Systems

1. The Contractor must have in place a Quality Assurance Program approved by the Inspection Authority during the performance of the Work which addresses the quality control elements below.

2. The quality control elements should include, as a minimum:

- Management Representative
- Quality Assurance Manual
- Quality Assurance Program Descriptions
- Quality Reporting Organization
- Documentation
- Measuring and Testing Equipment
- Procurement
- Inspection and Test Plan
- Incoming Inspection
- In-Process Inspection
- Final Inspection
- Special Processes
- Quality Records
- Non Conformance
- Corrective Action

3. The Contractor's facilities may be audited by Canada, or its authorized representative, during the performance of the Work to ensure that the approved system is in place and in accordance with the foregoing requirement.

4. The Contractor will be required to submit completed quality assurance documentation with each claim for payment as applicable.

7.19 Inspection, Test & Trials

1. During construction of the vessel, the Contractor must arrange for regular inspections and upon completion of the construction of the vessel, the Contractor must arrange trials. All Inspections and test and trials performed must be in accordance with the Annex A - TSOR and Annex F - Inspection/Quality Assurance/Quality Control. The Inspection Authority must approve any additional testing not specified in the TSOR.

2. The Contractor must update as required the Inspection and Test Plan (ITP) provided with its bid and submit to the Contracting Authority and the Inspection Authority **seven days after contract award** for review and amended by the Contractor to the satisfaction of the Inspection Authority.

3. Once approved, any modification to the ITP must be pre-approved by the Inspection Authority. A revised ITP will be required should any modification be made.

7.20 Manuals

1. The Contractor must obtain and deliver to the Technical Authority for approval, no later than fourteen calendar days prior to delivery of the boat, all Data Books, Operating Instruction Books, Maintenance Manuals and Spare Parts Lists (including part numbers and ordering instructions) for all machinery and equipment fitted on the vessel as required. Once approved by the TA, the Contractor will provide two complete copies in accordance with and as specified in the TSOR.

2. Where manuals are examined by Canada, such examination does not relieve the Contractor of any responsibility under the Contract for ensuring the correctness of all details and adequacy of performance of the vessel, nor does it obligate Canada to accept, in part or in whole, an item of Work completed in accordance with such manual, nor does it mean such an item of Work meets the requirements of the TSOR.

7.21 Acceptance

1. Canada's provisional acceptance for delivery of the vessel must occur with the execution of a certificate in accordance with **form PWGSC 1105** upon satisfactory completion of the vessel and all trials. The execution of the certificates must in no way relieve the Contractor of any obligations under the Contract.

2. It is understood and agreed that where the work has been substantially completed and the parties have agreed upon the terms and conditions for the Contractor to make good any deficiencies, the certificate referred to above may be executed with a statement attached concerning the rectification of the deficiencies by the Contractor.

3. Canada's final acceptance must occur upon completion of the twelve (12) month warranty period and settlement of all accounts between the parties in relation to the Contract.

7.22 Government Supplied Material

The following equipment will be Government Supplied Material (GSM) for each vessel and must be installed, set-up, fully functional, tested in accordance with the TSOR and in accordance with each manufacturer’s installation recommendations:

1. Two Yamaha 225hp outboard motors per boat

The GSM parts will be shipped to the Contractor’s facility within 1- 2 months after Contract award.

ANNEX “A”

TECHNICAL STATEMENT OF REQUIREMENT (TSOR)

see attached separate document

ANNEX "B"

BASIS OF PAYMENT

Bidders must indicate for each of the following Items, their Bid price, excluding taxes.

Table 1: Firm prices for one GRP RHIB with cabin and trailer, delivered.

Item	Description	Unit Price CDN$ (a)	Quantity (b)	Extended Price (a)x(b)
1	GRP RHIB with cabin built in accordance with Annex A et D.	$	1	$
2	One trailer built in accordance with Annex "A" and "D".	$	1	$
3	Delivery of boat and trailer, Delivered Duty Paid (DDP) as per RFP destination.	$	1	$
			Total Price (Firm qty)	$

Table 2: Priced Options

Item	Description	Unit Price CAN$
1	GRP RHIB with cabin built in accordance with Annex A et D:	$
2	One boat trailer built in accordance with Annex "A" and "D"	$
3	Delivery of boat and trailer, Delivered Duty Paid (DDP) as per exercised option	$TBD

(a) The prices quoted for the options must remain firm, remain valid and open for acceptance by Canada for one year after delivery of the initial vessel. The options proposed must be in accordance with the terms and conditions of this RFP.
(b) The options proposed will not form part of the Evaluation for the award of the contract in response to this RFP.
(c) The options, if incorporated into the Contract, in whole or in part, may or may not be exercised at the sole discretion of Canada.
(d) Only the option proposed by the successful bidder may be considered by Canada.
(e) Canada reserves the right to negotiate the priced options.

Unscheduled Work Rates

The following unscheduled work rates will be included in the Basis of Payment, however they will not form part of the bid evaluation.

Bidders must provide the following requested rates:

1. The Charge-out Rate specified below includes all classes of labor, engineering and foreperson, and all overheads, supervision and profit. The Charge-out Rate will be used for pricing unscheduled work that results in an increase or decrease in the Work Period, except as noted in the clause entitled "Overtime."

Charge-out Rate - $..... /person/hour.

2. Overtime:

Occasionally, Canada may elect to authorize overtime, for Unscheduled Work only. If this is the case, and the rate is greater than the Charge-out Rate, cost of labor hours will be determined on the following basis;

Time and one-half rate: $..... /person/hour

Double Time Rate: $..... /person/hour

3. The cost of material must be the net laid-down cost of the material to which must be added a mark-up of 10% of the net laid-down cost of the material. For the purposes of pricing, Unscheduled Work and material must be deemed to include subcontracts.

ANNEX "C"

INSURANCE REQUIREMENTS

1. The Contractor must comply with the insurance requirements specified below. The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract.

2. The Contractor is responsible for deciding if additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any additional insurance coverage is at the Contractor's expense, and for its own benefit and protection.

3. The Contractor must forward to the Contracting Authority within 10 days after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. Coverage must be placed with an Insurer licensed to carry out business in Canada. The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

(A) General Commercial Insurance

1. The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than $2,000,000 per accident or occurrence and in the annual aggregate.

2. The Commercial General Liability policy must include the following:

(a) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.

(b) Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.

(c) Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.

(d) Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.

(e) Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.

(f) Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.

(g) Employees and, if applicable, Volunteers must be included as Additional Insured.

(h) Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program).

(i) Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.

(j) Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty days written notice of policy cancellation.

(k) If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.

(l) Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.

(m) Non-Owned Automobile Liability - Coverage for suits against the Contractor resulting from the use of hired or non-owned vehicles.

(n), (o), (p), (q) not used.

(r) Litigation Rights: Pursuant to subsection 5(d) of the Department of Justice Act, S.C. 1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgement of receipt.

For the province of Quebec, send to:
Director Business Law Directorate,
Quebec Regional Office (Ottawa),
Department of Justice,
284 Wellington Street, Room SAT-6042,
Ottawa, Ontario, K1A 0H8

For other provinces and territories, send to:
Senior General Counsel,
Civil Litigation Section,
Department of Justice
234 Wellington Street, East Tower
Ottawa, Ontario K1A 0H8

A copy of the letter must be sent to the Contracting Authority. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Contractor's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Contractor's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

(B) Marine Liability Insurance

1. The Contractor must obtain Protection & Indemnity (P&I) insurance that must include excess collision liability and pollution liability. The insurance must be placed with a member of the International Group of Protection and Indemnity Associations or with a fixed market in an amount of not less than the limits determined by the Marine Liability Act, S.C. 2001, c. 6. Coverage must include crew liability, if it is not covered by Worker's Compensation as detailed in paragraph (2.) below.

2. The Contractor must obtain Worker's Compensation insurance covering all employees engaged in the Work in accordance with the statutory requirements of the Territory or Province or state of nationality, domicile, employment, having jurisdiction over such employees. If the Contractor is assessed any additional levy, extra assessment or super-assessment by a Worker's Compensation Board, as a result of an accident causing injury or death to an employee of the Contractor or subcontractor, or due to unsafe working conditions, then such levy or assessment must be paid by the Contractor at its sole cost.

3. The Protection and Indemnity insurance policy must include the following:

(a) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada as additional insured should read as follows: Canada, represented by Public Works and Government Services Canada.

(b) Waiver of Subrogation Rights: Contractor's Insurer to waive all rights of subrogation against Canada as represented by Fisheries and Oceans Canada and Public Works and Government Services Canada for any and all loss of or damage to the watercraft however caused.

(c) Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of cancellation.

(d) Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.

(e) Litigation Rights: Pursuant to subsection 5(d) of the Department of Justice Act, S.C. 1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgement of receipt.

For the province of Quebec, send to:
Director Business Law Directorate,
Quebec Regional Office (Ottawa),
Department of Justice,
284 Wellington Street, Room SAT-6042,
Ottawa, Ontario, K1A 0H8

For other provinces and territories, send to:
Senior General Counsel,
Civil Litigation Section,
Department of Justice
234 Wellington Street, East Tower
Ottawa, Ontario K1A 0H8

4. A copy of the letter must be sent to the Contracting Authority. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Contractor's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Contractor's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

ANNEX “D”

BIDDERS QUESTIONS AND CANADA RESPONSES

To be completed as required during the bid solicitation and inserted here

ANNEX “E”

SUBCONTRACTORS

Specification Item	Description of Goods/Services (Incl. Make, Model Number as applicable)	Name of Supplier	Address of Supplier

ANNEX "F"

INSPECTION / QUALITY ASSURANCE / QUALITY CONTROL

1. Conduct of Inspection

(a) Inspections will be conducted in accordance with the ITP provided and accepted by the Inspection Authority and as detailed in this Annex.

(b) The Contractor must provide its own staff or subcontractors to conduct inspections, tests and trials; excepting that Technical Authority or Inspection Authority personnel may be designated in the specifications, in which case the Contractor must ensure that its own staff are provided in support of such inspection/test/trial.

(c) As applicable, the Contractor must ensure that the required conditions stated in the specification prevail at the commencement of, and for the duration of, each inspection/test/trial.

(d) The Contractor must ensure that personnel required for equipment operation and records taking during the inspection/test/trial are briefed and available at the start and throughout the duration of the inspection/test/trial. Tradesmen or FSRs who may be required to effect minor changes or adjustments in the installation must be available at short notice.

(e) The Contractor is to coordinate the activities of all personnel taking part in each inspection/test/trial and ensure that safe conditions prevail throughout the inspection/test/trial.

2. Inspection Records and Reports

(a) The Contractor on the inspection record, test or trials sheets as applicable must record the results of each inspection. The Contractor must maintain files of completed inspection records.

(b) The Contractor's Quality Control (QC) representative (and the FSR when required) must sign as having witnessed the inspection, test or trial on the inspection record. The Contractor must forward originals of completed inspection records, together with completed test(s) and/or trials sheets to the Inspection Authority as they are completed.

(c) Unsatisfactory inspection/test/trial results, for which corrective action cannot be completed during the normal course of the inspection/test/trial, will require the Contractor to establish and record the cause of the unsatisfactory condition to the satisfaction of the Inspection Authority. Canada representatives may assist in identification where appropriate.

(d) Corrective action to remove cause of unsatisfactory inspections must be submitted to the Contracting Authority and to the Inspection Authority in writing by the Contractor, for approval before affecting such repairs and rescheduling of the unsatisfactory inspection/test/trial. Such notices must be included in the final records passed to the Contracting Authority and to the Inspection Authority.

(e) The Contractor must undertake rectification of defects and deficiencies in the Contractor's installation or repair as soon as practicable. The Contractor is responsible to schedule such repairs at its own risk.

(f) The Contractor must reschedule unsatisfactory inspections after any required repairs have been completed.

(g) Quality Control, Inspection and Test records that substantiate conformance to the specified requirements, including records of corrective actions, must be retained by the Contractor for three (3) years from the date of completion or termination of the Contract and must be made available to the Contracting Authority and to the Inspection Authority upon request.

3. Inspection and Trials Process

3.1 Drawings and Purchase Orders

(a) Upon receipt of two (2) copies of each drawing or purchase order, the designated Inspection Authority will review its content against the provisions of the TSOR. Where discrepancies are noted, the Inspection Authority will formally advise all concerned, in writing using a Discrepancy Notice. The resolution of any such discrepancy is a matter for consultation between the Contractor and other Government of Canada Authorities.

3.2 Inspection

(a) Upon receipt and acceptance of the Contractor's ITP, inspection will consist of a number of Inspection Points supplemented by such other inspections, tests, demonstrations and trials as may be deemed necessary by the Inspection Authority to permit him to certify that the work has been performed in compliance with the provisions of the specification. The Contractor must be responsible for notifying the designated Inspection Authority of when the work will be available for inspection, sufficiently in advance to permit the designated Inspection Authority to arrange for the appropriate inspection.

(b) The Inspection Authority will inspect the materials, equipment and work throughout the project against the provisions of the specification and, where non-conformances are noted, will issue appropriate INSPECTION NON-CONFORMANCE REPORTS.

(c) The Contract requires the implementation of a Quality Assurance/Quality Control system, so the Inspection authority must require that the Contractor provide a copy of its internal inspection report pertaining to a work item before conducting the requested inspection. If third party inspections are required by the Contract (e.g. inspections by a certified CWB 178.2 welding inspector), the reports of these inspections must be required before the Work is inspected by the Inspection Authority.

(d) The QA/QC system is a requirement, so if the documentation is presented to the Inspection Authority before an inspection stating that the Work is satisfactory but the Inspection Authority finds that the Work has not been satisfactorily inspected, the Inspection Authority must issue an Inspection Non-conformance Report against the Work and another against the failure of the Contractor's QA/QC system.

(e) Before carrying out any inspection, the Inspection Authority must review the requirements for the Work and the acceptance and/or rejection standards to be applied. Where more than one standard or requirement is called up and they are potentially conflicting, the Inspection Authority must refer to the order of precedence in the Contract to determine the standard or requirement to be applied.

3.3 Inspection Non-conformance report

(a) An Inspection Non-conformance report will be issued for each non-conformance noted by the Inspection Authority. Each report will be uniquely numbered for reference purposes, will be signed and dated by the Inspection Authority, and will describe the non-conformance.

(b) When the non-conformance has been corrected by the Contractor and has been re-inspected and accepted by the Inspection Authority, the Inspection Authority will complete the Report by adding an applicable signed and dated notation.

(c) At the end of the project, the content of all Inspection Non-conformance Reports which have not been signed-off by the Inspection Authority will be transferred to the Acceptance documents before the Inspection Authority's certification of such documents.

3.4 Tests, Trials, and Demonstrations

(a) To enable the Inspection Authority to certify that the Work has been performed satisfactorily, in accordance with the Contract and specifications, the Contractor must schedule, co-ordinate, perform, and record all specified tests, trials and demonstrations required by the Inspection Authority and the Specifications and any additional tests and trials performed by the Contractor required by the Inspection Authority.

(b) Where the specifications contain a specific performance requirement for any component, equipment, sub-system or system, the Contractor must test such component, equipment, sub-system or system to the satisfaction of the Inspection Authority, to prove that the specified performance has been achieved and that the component, equipment, sub-system or system performs as required by the specifications.

(c) Tests, trials and demonstrations must be conducted in accordance with a logical, systematic schedule which must ensure that all associated components and equipment are proven before sub-systems demonstration or testing, and that sub-systems are proven before system demonstration or testing.

(d) Where the Specifications do not contain specific performance requirements for any component, equipment, sub-system or system, the Contractor must demonstrate such component, equipment, sub-system or system to the satisfaction of the Inspection Authority.

(e) The Contractor must co-ordinate each test, trial and demonstration with all interested parties, including the Inspection, Contracting and Technical Authorities; regulatory authorities; Classification Society; Sub-contractors; etc. The Contractor must provide the Inspection Authority and other Government of Canada Authorities with a minimum of ten (10) working days’ notice of each scheduled test, trial, or demonstration.

(f) The Contractor must keep written records of all tests, trials, and demonstrations conducted required by the QA System.

(g) The Contractor must in all respects be responsible for the conduct of all tests and trials in accordance with the requirements of the Contract.

(h) The Contracting Authority and the Inspection/Technical Authority reserve the right to defer starting or continuing with any sea trials for any reasonable cause including but not limited to adverse weather, visibility, equipment failure or degradation, lack of qualified personnel and inadequate compliance with safety standards.

ANNEX "G"

Form 1 Intellectual Property Rights Certification PROVEN Design

Instructions:

1. Form 1 must be completed by the Bidder and signed by each of the entities listed below for the proven vessel design the Bidder has proposed as part of its Bid:

a) the Bidder; and

b) each owner of Intellectual Property Rights in the PROVEN Design that is the subject of the Bid, including any person that holds any ownership right, title or interest in the PROVEN Design or any right that restricts the owners' ability to license the PROVEN Design to Canada on the terms specified in the Contract.

2. The completed and executed Form 1 shall be included by the Bidder in its Bid,

Form 1

PROVEN Design – Intellectual Property Rights Certification

To: **The Government of Canada**

Re: **RFP bearing solicitation number** _____

SUBJECT: **CERTIFICATION TO CANADA AS TO RIGHTS TO BID THE PROVEN DESIGN TO CANADA:**

Capitalized terms used herein that are not otherwise defined herein and that are defined in the RFP have the meaning provided therein.

a) The owner(s) of all Intellectual Property Rights of the PROVEN Design that is the subject of the Bid, including all Information therein required to be delivered under the Contract are, as follows, and there are no other owners, and that each owner has the rights and has granted the rights in all components of the PROVEN Design owned by it to the Bidder to make the certifications in b), below true:

[●*owner*]

[●*owner*]

[●*owner*]

[●*owner*]

[Instructions: The list above must include any person that holds any right, title or interest in the PROVEN Design. Delete the text of this instruction.]

b) The Bidder, **[●*Bidder's legal name*]**, has full power and authority and the unfettered right to grant to Canada the licenses and Intellectual Property Rights in the PROVEN Design, including all Information required to be delivered thereunder in respect of the PROVEN Design, on the terms specified in the Contract, the terms of which are in the RFP.

[Remainder of this page left intentionally blank.]

Signed for and on behalf of:

[Instructions: Amend signature blocks below as necessary. Delete the text of this instruction.]

_____ _____

[●Bidder] Date

Name: **[●Name of Signatory]**
Title: **[●Title of Signatory]**

_____ _____

[●Owner] Date

Name: **[●Name of Signatory]**
Title: **[●Title of Signatory]**

_____ _____

[●Owner] Date

Name: **[●Name of Signatory]**
Title: **[●Title of Signatory]**

_____ _____

[●Owner] Date

Name: **[●Name of Signatory]**
Title: **[●Title of Signatory]**

Form 2 – Reference for Proven Vessel Design

Name of Bidder:	
Name of Vessel Owner:	
Address of Vessel Owner:	
Phone number of Vessel Owner:	
Email of Vessel Owner:	
I confirm that [Name of manufacturer] manufactured a vessel in accordance with article 3.3.1 Proven Vessel Design with Hull Identification Number or equivalent identification number if registered outside of Canada and the United States [ ].	_____ _____ Signature of Bidder Date
Date Vessel was put in service:	

Form 3 – Reference for Vessel Construction Experience

Name of Bidder:	
Name of Vessel Owner:	
Address of Vessel Owner:	
Phone number of Vessel Owner:	
Email of Vessel Owner:	
I confirm that [Name of Bidder] manufactured a proven vessel in accordance with article 3.3.2 Vessel Construction Experience with Hull Identification Number or equivalent identification number if registered outside of Canada and the United States [ ].	_____ _____ Signature of Bidder Date

Fisheries and Oceans Canada | Pêches et Océans Canada

DEPARTMENT OF FISHERIES AND OCEANS

ANNEX A

Technical Statement of Requirements
Requisition number F7044-170071, provision of quantity one (1), 8.75 to 9.25 m Glass Reinforced Plastic (GRP) Rigid Hull Inflatable Boat (RHIB) with regular cabin and trailer

Revision 0, February 9, 2018

TRANSPORT CANADA MARINE SAFETY BRANCH (TCMSB)
TP1332 APPROVED CONSTRUCTION

Canada

Document Control

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#	Date	Description	Initials
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ABBREVIATIONS

ABYC	American Boat and Yacht Council
AC	Alternating Current
ASTM	American Society for Testing and Materials
CFM	Contractor Furnished Material
CSA	***Canadian Shipping Act***
CSA	Canadian Standards Association
COLREGS	Collision Regulations
DC	Direct Current
GPS	Global Positioning System
GRP	Glass Reinforced Plastic
GSM	Government Supplied Material
ISO	International Organization for Standardization
PVC	Polyvinylchloride
RHIB	Rigid Hull Inflatable Boat
TA	Technical Authority (As defined by the Contract)
TCMS	Transport Canada Marine Safety
TSOR	Technical Statement of Requirements
UV	Ultraviolet
VHF	Very High Frequency
WMO	World Meteorological Organization

LIST OF REFERENCE DOCUMENTS

REFERENCE	TITLE
ASTM F1166	Standard Practice for Human Engineering Design for Marine Systems, Equipment and Facilities
TP 1332	Construction Standards for Small Boats
TP 13430	Standard For Tonnage Measurement of Ships
TP 14070	Small Commercial Vessel Safety Guide
TP 14612	Procedures for approval of life-saving appliances and fire safety systems, equipment and products.
TP14475	Canadian Life Saving Appliance Standard.
ISO 12217	Small Boat – Stability and Buoyancy Assessment and Categorization
Canada Shipping Act	Small Vessel Regulations
Canada Shipping Act	Collision Regulations (COLREGS)
ABYC	American Boat and Yacht Council Standards
Canadian Standards Association (CSA) CSA W47.2-M1987	Certification of Companies for Fusion Welding of Aluminium
(CSA) C22.2 No. 183.2-M1983 (R1999)	Standards for DC Electrical Installations on Boats
CT-043-EQ-EG-001-E	Canadian Coast Guard Welding Specification, August 2017

1.0 OVERVIEW

1.1 GENERAL

1.1.1 The Department Of Fisheries and Oceans (DFO) buys, manages and operates numerous small craft in support of its Departmental programs and other missions.

1.2 REQUIREMENT

1.2.1 The Contractor must design, fabricate and supply quantity one (1) Glass Reinforced Plastic (GRP) Rigid Hull Inflatable Boat (RHIB) with a regular cabin and trailer based on the current Transport Canada Marine Safety Branch (TCMSB) Marine Safety Publication TP 1332 “Construction Standards for Small Vessels” (hereinafter referred to as TCMSB TP 1332). The boat must be dual gasoline outboard motor configuration.

1.2.2 The primary role of these RHIB will be Fisheries Conservation and Protection (C&P) in the Sept-Îles area and for the Quebec region.

1.2.3 The secondary roles will be search and rescue and other fisheries enforcement duties such as boarding and surveillance duties within the reasonable capabilities for this type and size of craft.

1.1.1 These RHIB will be shore-based and launched and recovered by trailer and/or ship based and launched and recovered from a ship.

2.0 DESIGN AND CONSTRUCTION REQUIREMENTS

2.1 GENERAL

2.1.1 Unless stated otherwise all components, equipment and material must be contractor supplied.

2.2 ERGONOMIC DESIGN

2.2.1 Hazardous operating conditions must be prevented by arranging machinery and equipment in a safe manner; providing guards for all electrical, mechanical and thermal hazards to personnel; and providing guards or covers for any controls that might accidentally be activated by contact of personnel.

2.2.2 The boat must be designed and constructed to accommodate both male and female crew from approx. 5’ to 6’ 4” in height, wearing cold weather clothing and equipment in accordance with ASTM F1166-07 Standard Practice for Human Engineering Design for Marine Systems, Equipment, and Facilities.

2.2.3 Human engineering factors considered in design must include accessibility, visibility, readability, crew efficiency and comfort. All equipment must be accessible for use, inspection, cleaning and maintenance.

2.2.4 Equipment must be accessible for use, inspection, cleaning and maintenance as per ASTM F1166-07.

2.3 VIBRATION

2.3.1 The boat and all components must be free of local vibration that could endanger boat personnel, damage boat structure, machinery or systems, or interfere with the operation or maintenance of boat machinery or systems.

2.3.2 Mounts for movable components, including items moved for stowage, towing or transport must be provided with resilient material as necessary to prevent rattling.

2.3.3 Loosening of fasteners under vibration must be prevented by the use of self-locking fasteners.

2.4 EQUIPMENT PROTECTION

2.4.1 The Contractor is responsible for the care of all equipment. All parts, especially those having working surfaces or passages intended for lubricating oil, must be kept clean and protected during manufacture, storage, assembly and after installation. Equipment must at all times be protected against dust, moisture or foreign matter and must not be subject to rapid temperature changes or extremes in temperature.

2.5 SITE CLEANLINESS

2.5.1 During construction, all chips, shavings, refuse, dirt and water must be removed at the completion of the work shift or sooner. The Contractor must ensure measures are taken to avoid wear and damage incident to construction, and to prevent corrosion or other deterioration. Equipment subject to freezing must be kept drained, except during test and trials. Equipment must be kept clean and protected from the environment prior to installation.

2.6 STRUCTURAL STRENGTH

2.6.1 All structures and components (hull, deck, seating, etc.) must be of sufficient strength to withstand when in the Fully Loaded Condition, the lateral and vertical impact-loading that equates to the conditions of the operational requirements.

2.7 LAUNCHING

2.7.1 The boat must be capable of being launched, recovered and transported by road trailers and / or from other vessels as indicated in this specification.

2.7.2 The boat must have a three (3) point to single point lifting arrangement (with two (2) points at the transom and one (1) point at the bow complete with a rated three (3) legged sling, shackles and lifting eye. This arrangement is to facilitate lifting the boat with a crane (both on shore and ship based).

2.8 HULL

2.8.1 Rigid hull must be constructed of vinylester glass-reinforced plastic. All materials used in the hull construction must be fire-retardant or non-combustible.

2.8.2 The deck and hull must be constructed of similar materials. The deck must have a suitable non-skid surface.

2.9 DECK

2.9.1 Deck must be self-draining, by means of non-return freeing ports or similar. The deck above the watertight compartments must be bolted for easy removal to allow access for repair of buoyancy compartments beneath.

2.10 TIE DOWNS

Stainless steel deck tie downs will be fitted on the forward deck area for the securing of deck cargo. (Minimum of four (4) per boat required).

2.11 STOWAGE

2.11.1 The Contractor must provide a watertight compartment for safe stowage of equipment and accessories. Arrangements must be provided for safe, secure and accessible stowage of an anchor and cable, paddles, and other equipment.

2.12 BEACHING SHOE

2.12.1 A high-density protective shoe of stainless steel or equivalent composite must be fitted the full length of the keel, to protect against damage from grounding or similar hazards. This shoe must not detract from performance or sea keeping capabilities, and it must be capable of withstanding the horizontal and vertical impact loading associated with the boat operational requirements. (See section 3.3 Operational Performance - Beaching).

2.13 TOWING/TRAILERING

2.13.1 A bow eye or U-bolt arrangement must be incorporated into the construction of the stem, suitable for towing the boat at a speed of five (5) knots in calm water in the normal loaded condition, on an even keel without damaging the boat or causing undue chafing of the towline. This bow eye must also be suitable for trailering purposes.

2.14 OUTBOARD MOTOR CRASHBAR

2.14.1 A reinforced aluminum outboard crashbar bracket constructed of 5086 aluminum alloy is to be fitted to protect the outboard motors. The crash-bar must be removable if it obstructs outboard motor removal.

2.15 COLLARS

2.15.1 Collar must normally be inflatable type with at least six (6) separate chambers. Each chamber fitted with a suitable inflation system and over-pressure relief valves calibrated to manufacturer's specified Pounds per Square Inch (PSI). The Inflatable collar fitted must be red in color (RAL 3000) and constructed of material that meets the criteria for strength, elasticity, resistance to wear and longevity. The material must be thermo-welded polyurethane with a minimum weight of 1360 grams per square metre. The surface of the collar must be textured to provide for traction (Coolthane® L409OUPWNG4 meets this requirement)

2.15.2 Collar must be interchangeable and have a diameter of 24 inches so that custom fitting of spare collar is not required.

2.15.3 Inflatable collar must be slide on style attached to the hull at the bow and stern using mechanical fasteners in a manner that allows the collar to be easily removed for repair or replacement. The use of screws and lag bolts or glue-on type collar is not acceptable.

2.15.4 Collar must be supplied with a urethane based non-skid coating along the top of the tube.

2.15.5 Collar must be mechanically fastened on the back or inboard side.

2.15.6 Inflatable collars must be provided with protective wear strips all around. At least two (2) extruded neoprene rubber, or equivalent, rubbing strakes (100mm - 125mm wide) must be glued along the entire length of the outboard side of the collar to provide protection against abrasion and puncture.

2.15.7 Grab lines of black braided nylon rope construction must be fitted along the collar on both the port and starboard sides to provide access from both within the boat and for persons in the water. Grab lines must be mounted on the centerline of the collar, by means of a lacing cuff (not by D-Ring attachment).

2.15.8 A repair kit must be provided for inflatable collars for each boat. (see section 6.4.2)

2.16 STANDARDS

2.16.1 The boat constructed under this TSOR must be fabricated in accordance with the current TCMSB TP 1332 “Construction Standards for Small Vessels” and where applicable the American Boat & Yacht Council (ABYC)

2.16.2 The boat constructed under this TSOR must be fabricated of GRP composite construction.

2.16.3 The Contractor must construct each boat as per this TSOR and where this TSOR interferes or contravenes the above standard; the above TCMSB TP 1332 standard will take precedence

2.16.4 The Contractor must arrange for Technical/Contracting Authority site visits, during all phases of each boat’s construction. The site visits are required to insure that the boat constructed under this TSOR comply with each standard addressed in this TSOR. The Contractor must supply an electronic copy and two (2) hard copies of all drawings for the boat design to the Technical Authority.

2.16.5 The Contractor must supply a signed letter insuring the proposed RHIB complies with TCMSB TP 1332 and a completed Small vessel Compliance Form (available from the TCMSB web site), to ensure compliance with the current TCMSB requirements.

2.16.6 Electrical systems for the boat must be in accordance with TCMSB TP 1332 Section 8 “Electrical Systems”.

2.17 MATERIALS

2.17.1 All materials must be corrosion resistant and suitable for use in a salt water environment as detailed in the Operational Requirements. All materials normally subjected to sunlight must resist degradation caused by ultraviolet radiation. Galvanized materials are unacceptable.

2.17.2 Dissimilar Metals: Direct contact of electrolytically dissimilar metals is not allowed. Electrolytic corrosion must be prevented by insulating dissimilar materials from each other with gaskets, washers, sleeves, or bushings of suitable insulating material.

2.17.3 Aluminium: Aluminium alloy types 5086-H32 must be used for plate; aluminium alloy 6061-T6 (anodized grade), suitable for type 5356 filler alloy, must be used for extruded shapes and welded tubing and pipe. Non-structural items of trim and outfit such as hatch frames, castings, consoles, and hardware items may be of other aluminium alloys suitable for commercial saltwater marine use such as dual rated 5083 / 86 or 5052 or 6063-T54.

2.17.4 Stainless Steel: Stainless steel type 316L or 316 must be used for all stainless steel applications except as noted. Alloy 316L must be used in any welded

underwater components.

2.17.5 Glass Reinforced Plastics and Resins: Good lamination practises required throughout, eg. overlap distances, resin control, air removal from laminates, laminate repair and preparation for subsequent laminations and part bonding / secondary bonding. NOTE: Vessel Particulars may specify upgrade materials.

2.17.5.1 Minimum laminating material specification must include gel coats and skin-out of isothalic resins, which can be laid in Vinylester resins. No DCPD (Dicyclopentadiene) resins are to be used.

2.17.5.2 Fibre materials to be standard mat / rovings, or `stitch' combined materials, some of which may use Carbon or Kevlar strands. NO 'chopper' materials to be used in the hull.

2.17.6 Fittings and clamps must be stainless steel. Bolts used in all fittings must be Type 316 stainless steel.

2.17.7 Where flexible connections are required for steering and fuel systems, suitable hose with permanently crimped, detachable reusable type fittings must be used.

2.17.8 All materials and equipment must be stored installed and tested in accordance with the manufacturer's guidelines, recommendations and requirements.

2.18 FASTENERS

2.18.1 All fasteners must be of corrosion resistant materials.

2.18.2 Cadmium plated parts and fasteners, including washers, must not be used.

2.18.3 Direct attachment of alloys containing copper to aluminium is not permitted except for an electrical bonding strap.

2.18.4 No fasteners must be directly threaded into GRP. Aluminium or Stainless steel washers or backing plates must be used as appropriate.

2.18.5 Where nuts will become inaccessible after assembly of the vessel, nuts must be captured or anchored to allow reassembly and prevent backing off. Unless otherwise specified, self-locking nuts must be installed to prevent loosening of fasteners due to shock and vibration.

2.18.6 Fasteners in deck traffic areas must be flush-mounted to eliminate tripping and snagging hazards.

2.18.7 All GRP composite penetrations must have their exposed inner core areas protected / coated to prevent deterioration or de-lamination of the core.

2.19 FACILITIES

2.19.1 The Contractor must have a shop capable of maintaining temperature and humidity. It must be capable of maintaining temperature between 16°C and 25°C. It must be capable of maintaining relative humidity below 70%.

3.0 <u>OPERATIONAL REQUIREMENTS</u>

3.1 GENERAL

3.1.1 Unless otherwise stated, performance must be for conditions of zero sea state and no wind, in salt water with full load and complement. The boat must be designed and constructed for ease of maintenance and repair, long life, and

are to be easily supportable in the location of the delivery address of the boat, by local commercial facilities and suppliers. The boat must be expected to have a service life of at least ten (10) years, with an expected usage of between 600 and 800 hours per year.

3.1.2 Maximum speed: 35 knots - 40 knots.

3.1.3 Minimum speed: 20 knots in sea state 6 with 35-knot wind.

3.1.4 Endurance: 30 knots for six (6) hours.

3.1.5 Range: 200 nautical miles with 10% reserve at 25-knot minimum speed.

3.2 STEERING

3.2.1 Capable of steering 15 ^{o} from heading, in Sea State 6, with seas from any direction.

3.2.2 Steer and manoeuvre effectively at three (3) knots in Sea State 6.

3.2.3 Maintain course, made good over ground, when proceeding at three (3) knots with relative crosswind of 35 knots.

3.2.4 Capable of turning in its own length in Sea State 6.

3.2.5 Capable of steering effectively in Sea State 6 with winds of 30 knots while towing a 15 ton (displacement) vessel at 5 knots.

3.2.6 Be able to operate fully in depths of 1.0 metre with outboard motors fully lowered and be capable of basic manoeuvring in depths of 0.8 metre with the outboard motors in the partially raised position.

3.2.7 Operable by personnel, some without prolonged training or certification.

3.2.8 Must be easy to maintain.

3.3 BEACHING

3.3.1 Capable of beaching on soft (sand, earth or clay) surfaces at a speed of up to five (5) knots without damage to the hull.

3.3.2 Capable of beaching on hard (stone or concrete) surfaces at speeds of up to three (3) knots without damage to the hull.

3.4 ENVIRONMENTAL CONDITIONS

3.4.1 Capable of operating day or night in the following conditions:

3.4.1.1 Average ambient air temperature range: -5 ^{o} C to + 30 ^{o} C;

3.4.1.2 Average water temperature: 0 ^{o} C to +20 ^{o} C;

3.4.1.3 Wave heights of four (4) meters to six (6) meters (WMO Sea-State 6);

3.4.1.4 Wind speeds of 30 knots minimum;

3.4.1.5 Required to operate safely in ice infested waters, (some minor damage to each boat, not affecting stability or buoyancy is acceptable);

3.4.1.6 The boat must operate in freezing spray or freezing rain with accumulations of up to 6.0 mm while maintaining stability while allowing for safe transit in Beaufort force 7.

3.5 LAUNCHING, RECOVERY & TRANSPORTATION

3.5.1 The crafts must be readily road transportable on a trailer, must be able to be launched and recovered using the trailer at existing launch ramps. Must be capable of being launched and recovered from a mother ship.

3.6 MAINTENANCE

3.6.1 The crafts must be designed and constructed for ease of maintenance and repair, long life, and be easily supportable by local commercial facilities and suppliers.

4.0 PHYSICAL CHARACTERISTICS

4.1 VESSEL PARTICULARS

4.1.1 Length overall - between 8.75 and 9.25 metres
4.1.2 Breadth overall – between 3.0 and 3.2 metres
4.1.3 Maximum draft (outboard motors lowered) - between 0.80 and 0.90 meters.
4.1.4 Maximum draft (outboard motors raised) - between 0.65 and 0.75 meters.
4.1.5 Maximum freeboard (from top of collar at amidships, in normal load condition) 0.82 meters.
4.1.6 Maximum height of collar above deck 0.75 meters
4.1.7 Displacement (in normal load condition) between 4500kg and 4800kg.
4.1.8 Normal load conditions:
4.1.8.1 Crew of four (3) = 300kg;
4.1.8.2 Fuel = 700 liters to 750 liters;
4.1.8.3 Equipment & supplies = 500kg.
4.1.9 Hull material – Glass Reinforced Plastic (GRP).
4.1.10 Vessel style – Rigid Hull Inflatable Boat (RHIB) with cabin.
4.1.11 Propulsion – Twin 225 hp Yamaha outboard motors (GSM).
4.1.12 Sewage capacity – A holding tank must be incorporated into the Contractor supplied marine head and is to comply with the current TCMS pollution regulations.

5.0 VESSEL CONFIGURATION

5.1 CABIN ARRANGEMENT

5.1.1 The layout of the console and/or cabin must take into account ergonomic considerations, with easy viewing and access to all critical instruments and controls. The cabin deck to be covered with anti-fatigue matting. A marine Head is to be contractor supplied and installed in the cuddy cabin.

5.2 CABIN LOCATION

5.2.1 Provision must be made for safe passage of personnel without the necessity to stand or walk on the sponson.

5.3 CABIN REQUIREMENTS

5.3.1 The cabin must be sized to accommodate and provide seating for a four (4) person crew.

The cabin must be fully enclosed with access through a weather tight door in the aft bulkhead, watertight door in fwd bulkhead and weather tight slide pilot doors (one Port & Starboard). The cabin must be of such a design that the operator will have an unobstructed view from directly forward to 22 ½ ° abaft the beam on the port and starboard sides. The enclosed wheelhouse door arrangement as

detailed above is for three (3) wheelhouse doors, two (2) side pilot doors, one (1) main rear door (all with windows and slider operated). The cuddy must have a forward watertight door to access the bow and a watertight access hatch. Visibility as detailed above is full 360 degree from large safety glass windows in front, sides and rear of wheelhouse. Cabin and cuddy must be heated with a Webasto Air Top EVO 5500, Model no Artikel Nr. 1312517C (or equivalent), such that the wheelhouse and cuddy cabin are heated and there is a means provided to reduce window fogging and icing. The Contractor must calculate the required size of the total space being serviced by the heater and use this measurement when ordering the system. The Contractor must install the system as per the manufacturer's recommendations.

5.3.2 Two (2) electric windshield wipers with pantograph arms and a wiper washer system are to be installed one (1) on each fore window. The windshield wipers are to be activated individually by a switch –four (4) positions (stop-slow-fast-intermittent) - located in the pilot house.

5.3.3 BUNKING

5.3.3.1 Sleeping accommodations will be provided for two (2) personnel within the specifications outlined in section 2.2 Ergonomic Design.

5.3.3.2 Two (2) foam bunks must be located in the forward cuddy compartment and be covered with rugged marine material.

6.0 OUTFIT GENERAL

6.1 TOWING

6.1.1 Sufficient barrier protection must be provided to protect control station from potential recoil of towline.

6.1.2 A cruciform towing post must be fitted aft, ahead of the thrust point of the craft (4000 pound tow capacity minimum) and a removable cruciform tow post (4000 pound tow capacity minimum), fitted toward the bow. The tow posts to be stamped with the Safe Working Load (SWL) of each post, and the paint must be highlighted.

6.2 INTERIOR OUTFIT

6.2.1 SEATING

Seating must be provided in the wheelhouse for the operator and navigator via two (2) fixed shock mitigating seats (Shoxs model 2000 or equivalent) adjustable front to rear and for height, with head rests, foot rests, adjustable backrest and folding armrests. Shock mitigating seats must have adjustable ride to accommodate variable personnel characteristics. Seats are to be mounted on a raised storage box and be located in two rows of two on both port and starboard side allowing for adequate room for both seating and standing of all personnel. Two (2) additional seats must be provided and be knockdown seats. Fabric of the upholstery must be rugged Naugahyde or equivalent that must be resistant to tearing, puncture, and environmental conditions and moisture. All four (4) seats must be Contractor supplied and installed.

6.2.2 COAT HOOKS – Two (2) Stainless steel coat hooks are to mounted on the aft interior bulkhead of the main cabin.

6.2.3 CONSOLE INSTRUMENTATION

6.2.3.1 Operators console must be fitted with all appropriate gauges as recommended by the propulsion-system manufacturer, as a minimum the following gauges are to be provided on the console:

6.2.3.1.1 Tachometer for each engine;
6.2.3.1.2 Fuel gauge for each tank;
6.2.3.1.3 Volt meter for each engine;
6.2.3.1.4 Tilt/trim gauge for each motor;
6.2.3.1.5 Oil pressure gauge, if applicable;
6.2.3.1.6 Oil level gauge;
6.2.3.1.7 Hour Meters for both Outboard motors;
6.2.3.1.8 Cooling water temperature gauge;
6.2.3.1.9 Water Pressure gauge for each motor; and,
6.2.3.1.10 Battery condition/ voltage meters for each battery.

6.2.3.2 Note: Bidders must design the console to incorporate the gauges and instruments they recommend for effective operation of the boat. The government will supply twin (2) 225 HP Gasoline outboards. Bidders must supply and install the controls and gauges that are recommended by the suppliers for operation of these engines. Hour meters must be installed.

6.3 AFT DECK MACHINERY

6.3.1 The Contractor must supply and install a boom davit with a capacity of 750 pounds on the aft deck. The mast jib must be adjustable in order to be able to lift objects 1 meter from the side of the boat. The boom must have locking device in both positions in or out by using a spring loaded pin at the bottom and the mast must be retractable. Metal backing plates in the deck and tube carrier must be installed to allow for the installation and easy removal of the davit. The davit safe working load (SWL), 750 lbs must be stamped or identified in red on the davit such that it is clearly visible to all operators and crew of the RHIB.

6.3.2 The Contractor must supply and install a hauler of 750 pounds capacity on boom davit. The model to be installed must be STRIGHT-MACKAY catalogue# 21341255B hydraulic hauler 10 inches with Char-Lynn motor 3 101-1003.

6.3.3 The Contractor must supply and install a hydraulic power pack in a case attached to the boat powered with a gas engine to drive deck equipment exhaust piping must run the exhaust from the engine directly true the transom. The model to be installed must be STRIGHT-MACKAY catalogue: # 11-127B hydraulic power pack powered with a Honda gas engine 5.5 hp with a12 volt starter installed in a GRP box, complete with interior fire retardant interior coatings.

6.4 LIFESAVING & EMERGENCY EQUIPMENT

6.4.1 The following items must be provided with appropriate stowage / securing arrangements (as appropriate for each item). All fittings, Contractor supplied,

must be heavy duty, corrosion resistant 316 stainless steel fittings. All items must be readily accessible (the foot pump and the repair kits must be stowed in a stowage locker). All items must be readily accessible.

6.4.2 Collar patch kit (for inflatable collar)

6.4.3 Foot pump (bellows type, for floatation collar) and a 12V High volume pressure pump

6.4.4 Anchor chocks installed on the fore deck

6.4.5 A water-resistant flashlight and a set of spare batteries.

6.4.6 Two (2) wooden paddles

6.4.7 One extinguisher (Class 5BC, marine type) with mounting bracket installed on RHIB

6.4.8 Anchor (Fortress FX16 model or equivalent) with 200 feet of ½" line and a 5 meter galvanized chain

6.4.9 Sea anchor and Line

6.4.10 Four (4) 25-foot mooring lines

6.4.11 Four (4) 6 inch diameter fenders

6.4.12 Transport Canada approved First aid kit

6.4.13 Air horn

6.4.14 Buoyant heavy line of at least 15 meters

6.4.15 TCMS approved radar reflector

6.4.16 ACR RLS 406MZ beacon (EPRIB) with hydrostatic release, installed

6.4.17 Six (6) TCMSB approved flares, among which at least 3 of which to be type A, B or C.

7.0 SYSTEMS GENERAL

7.1 PROPULSION

7.1.1 ENGINES

7.1.1.1 Outboard motors must be Government Supplied Materiel (GSM) twin (2) 225 HP Yamaha gasoline Outboard Engines. The Contractor must install the outboards, supply and install the controls for each outboard on the RHIB.

7.1.1.2 The engines must be installed, mounted and operated in accordance with the engine manufacturer's recommendations. The use of engine manufacturer's approved accessories and equipment is required. Equipment and components must not be used, or trials performed on the engines that would, in any way, void the engine manufacturer's warranties.

7.1.2 PROPELLER(S)

7.1.2.1 Two identical propellers for each outboard (Two are spares) must be provided by the Contractor (CFM).

7.1.2.2 Propeller(s) must be properly sized and Contractor installed.

7.1.2.3 Contractor must inform the Technical Authority of appropriate pitch and diameter to meet the Performance Requirements as determined by the Contractor through their developed design check.

7.1.2.4 The propellers must be of stainless steel.

7.1.3 CONTROLS

7.1.3.1 Propulsion control system installation must include a dual binnacle engine controls located on the starboard side of the helm console. The controls must conform to engine manufacturer's recommendations and must not interfere with any of the other controls.

7.1.3.2 Engine package must incorporate a lanyard style automatic shutdown feature (kill switch) for the engines, to be mounted near the ignition switch.

7.1.4 ALARMS

7.1.4.1 Monitoring system for the engine must include the following alarms:

7.1.4.2 Oil level gauge, for the remote tank, if applicable;

7.1.4.3 Coolant flow alarm, if applicable; and,

7.1.4.4 Engine overheat/high temperature alarm.

7.1.5 VERIFICATION OF INSTALATION

7.1.5.1 Installation of the motor, controls, lubrication and fuel systems, manometers, battery connections, are to be verified by an authorized technician. The motors are to be started by the authorized technician, who must provide a written report with a copy for the Technical Authority.

7.1.6 ENGINE BREAK-IN

7.1.6.1 The Contractor is to respect the engine manufacturer's break-in procedures.

7.1.7 PROTECTION OF CONTROLS

7.1.7.1 All control cables, electrical wiring for the motor and the steering hydraulic hoses are to be installed in UV resistant plastic pipes (LOOM). These pipes are to be installed in such a manner as to ensure that no cable is immersed in water.

7.2 STEERING

7.2.1 Steering systems must be remote hydraulic with self-contained oil reservoir, and replaceable seals on the rams, with a maximum of 4.0 turns from hard over to hard over. (The SeaStar® and / or DayStar steering systems, depending on vessel horsepower, from Teleflex meet this requirement). Particular propulsion systems may have their own requirements for steering which must be adhered to.

7.2.2 All hydraulic steering hoses must be routed in such a manner that they are protected from physical damage and so that there is no pinch or chafing points on the hoses.

7.2.3 Hydraulic hoses must be of sufficient size and length to prevent pulsing. Hoses must be suitable for use in an exposed marine environment complete with stainless steel fittings.

7.2.4 The wheel / console connection must be of robust construction, to eliminate fore and aft or lateral movement of wheel / steering shaft fixture.

7.2.5 The Steering wheel must be stainless steel and may be rubber or plastic covered. The Steering wheel must be stiff enough that during rough water operations there is no flexing of the wheel and the wheel should be padded to provide a comfortable non-slip surface for the operator to grip. (Momo Marine steering wheels meet these requirements).

7.3 FUEL SYSTEM

7.3.1 The Boat must include the following;

7.3.1.1 The complete fuel systems must be supplied, installed, labeled and tested in accordance with Section 7 of TCMSB TP 1332 and ABYC specifications.

7.3.1.2 The fuel system must include two (2) Racor filter/separators suitable for fuel supply to the twin gasoline outboard motors.

7.3.1.3 All fuel valves must be readily accessible and labeled as per TCMSB TP 1332.

7.3.1.4 Fuel filling must be located in an accessible watertight / vented compartment designed to catch fuel from over filling or blow back, so that the fuel does not enter the vessel as per TCMSB TP 1332 requirements.

7.3.1.5 Remote fuel shutoff valves must be installed in accordance with TP1332 and ABYC requirements, remote from the fuel tanks and engine compartments. Labeled as per TCMSB TP 1332 requirements.

7.3.1.6 All fuel tanks are to be equipped with an anti-syphon valve installed on each suction

7.3.1.7 Fuel tank vent pipes are to be equipped with a non-return check valve

7.4 ELECTRICAL SYSTEM

7.4.1 The electrical system must meet TCMSB TP 1332 and ABYC Standards and be completely waterproofed and easily accessible, incorporating a waterproof breaker panel with a minimum of 10 circuits fitted. The Contractor must ensure that the breaker panel has 10% expansion room or a minimum of 2 spare breakers (whichever option is greater).

7.4.2 Twelve Volt (12V) DC distribution system must be provided to power the engine starting and boat service loads including:

7.4.2.1 Navigation lights;

7.4.2.2 Interior and Exterior Lighting;

7.4.2.3 Navigational equipment;

7.4.2.4 Instrumentation;

7.4.2.5 Bilge Pumps;

7.4.2.6 Electronics; and

7.4.2.7 Communications

7.4.3 Four (4) marine quality 12V power outlets must be suitably located throughout the vessel. Two of the 12V power plugs must be installed on or near Operator's console.

7.4.4 One (1) Xantrex Prosine 1800W Inverter (complete with transfer switch) wired to the Shore Power system (as detailed in 7.4.7) will run the accessory plugs including one to power a laptop computer. The Contractor must ensure that this plug can still operate when strictly on the AC shore power.

7.4.5 Batteries, Switches & Charger:

7.4.5.1 The boat is to be equipped with a system of three type M30MF deep-cycle batteries (2 for the motors and 1 for accessories) with a selector switch and connected in accordance with the motor manufacturer's technical specifications.

7.4.5.2 Batteries must be marine grade glass mat or gel type maintenance free to eliminate leakage, and a minimum 1000 deep-cycle cranking amps.

7.4.5.3 A battery charger is to be supplied and installed on the boat. It must be used to charge both battery banks when the boat is on shore power.

7.4.5.4 Battery switches must be recessed to prevent snagging or accidental switching.

7.4.5.5 Battery compartments must be watertight and fitted with a suitable means of gas venting.

7.4.6 Bilge Blower: The boat must be fitted with a 12V DC bilge blower system in accordance with TCMSB TP 1332 "Construction Standards for Small Vessels" and ABYC specifications. The bilge blower system must be controlled by a separate watertight switch and fuse located at the operator's console.

7.4.7 Shore Power Service:

A shore power connection must be fitted complete with a marine grade service rated 50-ft shore power cable, capable of supplying 120V AC, 30 ampere, single-phase service.

7.4.7.1 The boat's shore power receptacle must be a marine-style locking 30-amp waterproof male receptacle in a location that is accessible with all hatches closed.

7.4.7.2 Shore power must be connected to an AC distribution panel on the boat. Each AC circuit must have its own breaker. This distribution panel will supply the following:

7.4.7.2.1 Battery charger;
7.4.7.2.2 One domestic plug approve type, 15 A in cabin;
7.4.7.2.3 One domestic plug approve type, 15 A outside cabin;
7.4.7.2.4 One cabin light; and
7.4.7.2.5 Two spare circuits.

7.4.7.3 Cable Installation: Cables and conductors must be supported with clamps or straps at least every 12-18 inches on horizontal runs and every 14 inches on vertical runs. Cable runs in PVC fire retardant LOOM as deemed acceptable by TCMSB TP 1332 requirements.

7.4.8 Lighting:

7.4.8.1 Backscatter of console lights must be minimized in the design. In all cases, progressive marine grade dimmers must be fitted wherever

practicable, with the capability of dimming engine monitoring gauges and other indicators separately from compass illumination.

7.4.8.2 Boat must be fitted with four (4) marine grade floodlights suitable for illuminating forward and aft deck spaces. (The Hella Sea Hawk LED floodlights model 980670201 meets this requirement).

7.4.8.3 A blue flashing light (strobe type) must be fitted.

7.4.8.4 Navigation lighting must conform to CSA Collision Regulations.

7.4.8.5 Fitted searchlights: two (2) required as a minimum and must have remote control slew/tilt/focus capability, allowing 360º coverage. Fitted searchlights must produce at a minimum one million Candelas each. Mounting must minimize interference with operator's vision. Fixtures must be designed to resist the effects of vibration and moisture and must be protected from damage while laying alongside or while underway.

7.4.8.6 Handheld Searchlights: one (1) required as a minimum producing 1 million candelas at 12 volt supplied.

7.4.9 Radar Arch:

Radar Arch must be fabricated and installed above the cabin. The arch must be constructed so that the radar, antennae, lights and other fittings can be mounted with minimal effort. All wiring penetrations in the cabin must be made water tight using TCMSB approved watertight glands. All penetration must be hose tested upon completion for water tightness. Acceptance based on no water penetrating the interior of the cabin.

7.4.10 Magnetic Compass:

The contractor is to supply and install a Ritchie SS-5000W Super Sport Flush Mount compass – mounted in the Operator’s console. Non-white (red or green) lighting connected to the 12 volt DC electrical system. System must be supplied with its own waterproof marine-grade dimmer switch. Compass must be adjustable for deviation.

7.5 ELECTRONIC AND NAVIGATION EQUIPMENT

The Contractor must supply and install the following electronics. All antennas must be mounted on cabin top with fold down connections for road travel. All cable penetrations must pass through a watertight gland:

7.5.1 FLIR M625L with deluxe dual station accessory kit and FLIR 500-0395-00 joystick control unit top down installation riser kit and video screen mounted near the operator position;

7.5.2 Simrad NSS 12 EVO 3, c/w GPS, Sonar and radar capabilities. The system must be able to interface with Regulus II BSB charts;

7.5.3 4G Broadband Radar for Simrad NSS series includes Scanner, scanner cable 20m (66 ft), R110 interface box, Yellow Ethernet cable- 1.8m (6ft);

7.5.4 Simrad BSM-1 Sounder module with Airmar Xsonic B150M tilted element (20 deg) thru Hull transducer;

7.5.5 Simrad integrated Auto-pilot, AP44 VRF Pack - High Capacity;

7.5.6 Simrad GO 7XSR with HDI transducer, Backup GPS

7.5.7 NAIS 400 AIS transmit/receive/ gamss 2 Antenna;

7.5.8 Navionics MSD/NAV+CAD chart card;
7.5.9 GS-25 antenna/N2k Kit (for radar overlay);
7.5.10 One (1) Standard Horizon GX 5500S VHF with DSC capabilities radio. Complete with loud hailer/intercom function plumbed to Radio. VHF must be connected to GPS via NMEA to complete DSC capabilities;
7.5.11 Antenna, specification is Comrod AV60P-4 and Shakespeare 4187 -HD SS ratchet mount and 408 stand-off bracket;
7.5.12 Whelan 295SL100 Loud Hailer / Siren complete with speaker;
7.5.13 Clarion 437 M309 CD AM/FM stereo with two (2) 6.5" waterproof speakers;
7.5.14 The Contractor must supply and install an electric horn that meets the requirements of the Canadian Standards Association (CSA) Collision Regulations. The horn must be operated by a spring-loaded switch located on the operator's console;
7.5.15 The Contractor must provide and install a direct read compass with light on each boat. The magnetic compass must be mounted on the centreline of the operator stations, in easy view of the operator when facing forward. Deviation card development is an Owner responsibility. (The Ritchie Explorer meets this requirement.); and
7.5.16 Externally Mounted EPIRB ACR RLB-36 w/ Sea shelter 3 Cat 1 bracket.

7.6 DRAINAGE & BILGE SYSTEMS

7.6.1 Electric bilge pump with 2000 gallons per hour (gph) capacity must be fitted in each watertight division as well as a fixed manual operated diaphragm type bilge pump. The bilge pump must be located so that it takes suction from the lowest point of the hull. Piping will allow the bilge pump to discharge directly overboard. An automatic control must be fitted that turns on the electric bilge pump when water is present in the bilge. The electric bilge pump control switch must be located on the operator's console, with settings for 'on', 'off and 'automatic' operation. An indicator light and an audible alarm must be installed at the console that lights when the bilge pump is operating. Bilge pump(s) must be wired direct to battery, so that it is constantly active as per TCMSB TP 1332 requirements.
7.6.2 Hull drainage - a marine bronze garboard threaded plug must be provided in the lowest point to drain the hull when out of the water.
7.6.3 Inboard raw water wash down system (STRIGHT-MACKAY, Jabsco Pump, High Speed, 378 gallons per hour or similar)
7.6.4 Valves and handles must be bronze or stainless steel and must be located where they are readily accessible for operation, maintenance or removal.

7.7 PAINTING

7.7.1 GENERAL

7.7.1.1 The standard color of the hull, deck, collar, and console of the boat must be DFO Slate Grey (RAL7042). Upholstery on the seats must be black. All exposed aluminum surfaces must be matte black and outer surfaces of cabin must be grey.

7.7.1.2 Prior to delivery, the Contractor must ensure that all non-painted exposed aluminium is free of cosmetic blemishes, including all construction marks, scratches, gouges and stains.

8.0 TESTS & TRIALS

8.1 TESTS - GENERAL

8.1.1 The Contractor must inspect and test the following items, as a minimum, for adherence to the contract requirements and proper operation (proper operation means that the equipment can be started, operated, connected together and demonstrated to function in a normal fashion, as applicable). All discrepancies must be corrected prior to delivery. The required inspections and tests are minimums and are not intended to supplant any controls, examinations, inspections or tests normally employed by the Contractor to assure the quality of the vessel:

8.1.1.1 Weight;
8.1.1.2 Construction Quality;
8.1.1.3 Lifting Gear, if applicable;
8.1.1.4 Propulsion Engines, including starting;
8.1.1.5 Propulsion Controls;
8.1.1.6 Steering System;
8.1.1.7 Fuel System;
8.1.1.8 Electrical System; and,
8.1.1.9 Electronics.

8.2 SEA TRIALS - GENERAL

8.2.1 Sea trials must be conducted by the Contractor to demonstrate the vessel and its equipment conform to the requirements as stated in the Contract. All expenses incident to the trials must be borne by the Contractor, including fuel unless otherwise specified. A crew provided by the Contractor must operate the vessel during sea trials. Residual fuel, if not drained for shipping, must be delivered in its tank with the vessel.

8.2.2 All Sea Trial instrumentation and equipment must be furnished and operated by the Contractor. Trial instrumentation, where applicable, must not replace the vessel's instruments (e.g., engine tachometer, pressure gauges, and thermometers). The Contractor must furnish all necessary hardware and fittings and must install the measuring devices. After satisfactory completion of the trials, all instrumentation must be removed and all systems restored to their original condition. The Contractor must provide two (2) copies of the calibration data certifying the accuracy of the instrumentation for the tests and include it in the technical publications (see section 9.6).

8.2.3 The Contractor must submit a Test & Trials Plan, including a description of all of the acceptance trials to be performed. As a minimum, Using Appendix A, the following trials must be conducted: (the vessel must operate in the Normal Load Condition.)

8.2.3.1 Speed Trials - The speed trials must be done over a course at least one (1) nautical mile in length. Two (2) runs must be made over the course, one (1) in each direction with the speeds for the two (2) runs averaged. The use of GPS data (averaged) is acceptable;

8.2.3.2 Endurance Trial - The boat must operate at maximum speed for a minimum of ten (10) minute intervals in the Fully Loaded Condition over one (1) hour period considering the break in procedures of the equipment. During the endurance trials, it must be demonstrated that all parts of the propulsion system are in full operation. All systems must be operated to check for proper lubrication, control and alignment. Fuel consumption must be recorded for the one-hour trial;

8.2.3.3 Astern Propulsion - The vessel must be operated and manoeuvred using astern propulsion to establish the astern performance. During the backing performance tests the throttles must be set to provide 1/3 of the rated engine horsepower. In order to demonstrate astern performance of the engines in an emergency stop and to test the strength of the foundations, the engine must be subjected to two stops from full power ahead at maximum speed to dead in the water using reverse thrust. Time required to perform this trial must be recorded; and,

8.2.3.4 Steering Gear - Tests must be conducted on the steering gear to demonstrate the adequacy of the steering system under all operations. Manoeuvring tests must be performed to ensure that the vessel meets the stated requirements. Manoeuvring trials must be conducted in the Normal Load Condition and repeated in the Full Load Condition.

8.2.4 The Contractor must provide a Tests & Trials Sheet, (Appendix A) for each boat and include this sheet in the technical publications (see section 9.6).

8.2.5 Public Works and Government Services Canada Contract Authority and Technical Authority must be notified no less than 2 weeks prior to sea trials. The Technical Authority will witness and attend the sea trials. Sea trial results must be forwarded to the Technical Authority prior to delivery of the vessel.

8.2.6 At the conclusion of sea trials each vessel must be thoroughly cleaned and inspected. Engine cooling systems must be flushed through with fresh water. The Contractor must repair any damage to the vessel or ancillary equipment resulting from sea trials, to the satisfaction of the Technical Authority.

8.2.7 For the purpose of the trials, Normal Loaded Condition must be considered to be the basic vessel, fitted with all normal equipment, full fuel, with complement and loads per Vessel Particulars, (see section 4.1).

8.2.8 Final Inspection and Acceptance (PWGSC Acceptance Document) for delivery Final Inspection must not be performed until all tests have been satisfactorily completed with data available for review. The vessel must be ready for delivery in all respects, except for final preparation for shipment. The Contractor must provide personnel, as required, to resolve questions and to demonstrate equipment operation maintenance accessibility, removal and installation. The Contractor must document the results of the Final inspection

and provide these results to the Contracting Officer, a hard copy of the trial results must be shipped with the deliverables for each vessel. Where applicable, serial numbers and other identifying information must be recorded for each boat and engine and supplied to the Contracting Officer.

8.2.9 Stability examination per TCMSB TP1332 will require the Contractor to record all stability calculation and trial results and provide a copy for each craft produced, to be placed in the technical manual, and two (2) copies for the Technical Authority.

8.2.10 Final Acceptance upon delivery, the Technical Authority, or a representative of the Technical Authority will conduct the final delivery inspection. The Contractor must repair any damage to the vessel or ancillary equipment resulting from shipping, to the satisfaction of the Technical Authority.

8.2.11 Trial Records: The Contractor must maintain records of testing for each vessel for a minimum of two years. The Contractor must prepare a testing check sheet that certifies that each test has been completed. The check sheet must indicate the actual weight of the vessel in Light Condition. The check sheet must also indicate the total loaded weight.

9.0 DOCUMENTATION

9.1 GENERAL

All documentation must be provided in both official languages (French and English)

9.2 NATIONAL ASSET CODE

9.2.1 The National Asset Code for the RHIB is VXB83. The contractor must add this 5 character code to the builder's plate of each vessel with the prefix "National Asset Code".

9.3 BUILDER'S PLATE

9.3.1 A Builder's Plate must be affixed to the RHIB in a readily visible location, e.g. for a boat, in way of the helm position, for a trailer on the left side of the tongue.

9.3.2 The plate must be made of a weather resistant material compatible with that to which it is affixed.

9.3.3 The dimensions of the plate must be not less than 200mm x 125mm

9.3.4 The plate must contain the following information, permanently etched:

9.3.4.1 National Asset Code;
9.3.4.2 Naval Architect/Designer;
9.3.4.3 Builder;
9.3.4.4 Hull Number;
9.3.4.5 Year of Construction;
9.3.4.6 Call Sign (if applicable); and,
9.3.4.7 Lightship Weight in kilograms.

9.4 TECHNICAL PUBLICATIONS

All technical publications are to be supplied in accordance with **Appendix B- FINAL DELIVERABLE DATA PACKAGE.**

10.0 TRAILER

The Contractor must supply a dual axle trailer to fit the boat and be rated at least 10% over the anticipated 'normal load' weight of the boat, minimum load capacity of 10,000 lbs. The contractor must record the trailer sales and registration information and provide the information in each vessel manual. The trailer must be certified commercial requirements in accordance with Department of Transport regulations for towing the vessel and be constructed and equipped as follows:

10.1 BOATMASTER COMMERCIAL LE TANDEM AXLE TRAILER OR EQUAL;
10.2 ALUMINUM I BEAM CONSTRUCTION;
10.3 GALVANIZED DURA-FLEX TOSION AXLES;
10.4 LT265/75R16 ALL TERRAIN TRUCK TIRES;
10.5 16" GALVANIZED SPOKE WHEELS;
10.6 8K BULLDOG DROP LEG JACK;
10.7 SAFETY LUBE LUBRICATION SYSTEM w/ TIMKEN BEARINGS;
10.8 ALL SS FASTENERS THROUGHOUT;
10.9 DIAMOND PLATE STEP FENDERS;
10.10 UHMW POLYMER AND ROLLER IN V ASSEMBLY;
10.11 SPARE TIRE WITH ALUMINUM MOUNT;
10.12 ALUMINUM WINCH STAND WITH 3500LB 2 SPEED WINCH & SNATCH BLOCK;
10.13 LED LIGHTS (NMMA COMMERCIAL GRADE LIGHTS AND WIRING);
10.14 GALVANIC BARRIER CORROSION PROTECTION;
10.15 DEEMAXX 13" SS ROTOR/316 SS CALIPER 7K - 2 AXLE DISC BRAKES;
10.16 20K SURGE BRAKE ACTUATOR 2 5/16" BALL HITCH;
10.17 SS BRAKE LINES;
10.18 ENTRY LADDER;
10.19 POLYMER UHMW ON BUNKS;
10.20 D-RING 3/4 26.5K 3x3 ID TIE DOWN POINTS;
10.21 ADJ GALVANIZED BOW STOP;
10.22 5/16 WINCH ROPE DYNEEMA;
10.23 GVW .....13,660 LBS;
10.24 NET CAPACITY.... 11,160 LBS;
10.25 TIRE ----LT 265/75R 16 3415 LBS @ 80 PSI;
10.26 TIRE CONTACT ------- 7.5" X 7.5";
10.27 MAX AXLE LOADS LEVEL CONFIGURATION---------7,000 LBS EA;
10.28 MAX SINGLE AXLE LOAD LESS THAN 5 MPH (RAMP CREST ENTRY)-- 21,000 LBS;
10.29 MAX PINTLE TONGUE WEIGHT----------2,000 LBS;
10.30 MAX PINTLEPULL LOAD ----------20,000 LBS;
10.31 D-RING TIE DOWN FRAME----SWL 15,666 LBS / 47,000 LBS BREAK STRENGTH;
10.32 D-RING TIE DOWN WINCH STAND---- SWL 15,666 LBS / 47,000 LBS BREAK STRENGTH;
10.33 SNATCH BLOCK---------- SWL 4100 LBS / 12500 LBS BREAK STRENGTH; AND,
10.34 MAX PULL ANGLE W/ SNATCH BLOCK--- 33 DEGREES.

11.0 SHIPPING AND DELIVERY

Prior to shipping, the boat is to be cleaned, appropriately protected and covered in accordance with the instructions specified in this section.

11.1 Prior to shipping, the boat must be secured on their respective trailers, cleaned, preserved and covered in accordance with this section. All areas of the boat are to be cleaned prior to covering for shipping. Bilges are to be dry and free of oil and debris and the fuel tanks must be full with fuel stabilizer added.

11.2 THE PROPULSION SYSTEM MUST BE PRESERVED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR STORAGE OF UP TO ONE (1) YEAR IN AN ENVIRONMENT THAT WILL BE SUBJECTED TO FREEZING TEMPERATURES.

11.3 THE BATTERIES ARE TO BE DISCONNECTED. A WARNING PLATE IS TO BE TIED TO THE STEERING WHEEL WITH A WIRE INDICATING THAT THE BOAT HAS BEEN PROTECTED FOR SHIPPING AND STORAGE AND MUST NOT BE STARTED UNTIL THE PROPULSION MACHINERY HAS BEEN REACTIVATED.

11.4 ALL CONTACT POINTS WITH THE BOAT ARE TO BE PADDED. A SHRINK WRAP COVER IS TO BE PROVIDED TO PROTECT THE BOAT DURING SHIPPING AND STORAGE.

APPENDIX A
SMALL CRAFT / VESSEL TESTS & TRIALS SHEET
CONTRACT # F7044-170071

Small Craft / Vessel Builder:	
Small Craft / Vessel Description:	
Hull Identification Number:	
National Asset Code:	
Date of Trials:	
Personnel in Attendance:	
Builder	
PWGSC	
DFO	
DFO	

Time: _____ **hrs** **Departing from** _____

Small Craft / Vessel Weights:	Dry Weight of Hull with cabin:		_____ lbs/ _____ kg
	Furnishings & Fittings:		_____ lbs/ _____ kg
	Engines & Equipment:		_____ lbs/ _____ kg
	Fuel: _____Imp gal	Fuel: _____Litres	_____ lbs/ _____ kg
	Total Weight of Small Craft/Vessel:		_____ **lbs/** _____ **kg**
	Number of Crew_____and operating equipment:		_____ lbs/ _____ kg

	Test Total Laden Weight:	_____ **lbs/** _____ **kg**
	Trailer weight:	_____ **lbs/** _____ **kg**
	Boat & Trailer weight:	_____ **lbs/** _____ **kg**
Motors: Starting - Operation **"IDENTIFY INBOARD/OUTBOARDS"**	**Port**	O **Immediate, Yes / No**
	Starboard	O **Immediate, Yes / No**
Propellers/Impellers	**Pitch**	_____
	Diameter	_____
	No. of Blades	_____
	Stainless Steel or Aluminum	O **S/S** ___ **AL**
Static Attitude & Trim:		
Weather Conditions: Refer to attached Beaufort Wind Scale. BWS No. _____		
Speed Trials	**Speed Required** _____ **-** _____ **knots**	
	Cruising Speed: measured mile 1 way	_____kts @ _____rpm
	Cruising Speed: measured mile return	_____kts @ _____rpm
	Averaged Cruising Speed:	_____**kts @** _____**rpm**
	Maximum Speed: measured mile 1 way	_____kts @ _____rpm
	Maximum Speed: measured mile return	_____kts @ _____rpm
	Average Maximum Speed _____**kts @** _____**rpm**	
Full Throttle		
	From dead stop to plane	_____ **seconds**

	From dead stop to 30 knots	_____ **seconds**
Astern Propulsion:	Straight line to 2000 rpm	O **Issues, Yes / No**
	Hard a-port	O **Issues, Yes / No**
	Hard a-starboard	O **Issues, Yes / No**
	Emergency stop	_____ **seconds**
Tubes (if applicable)	No. of Chambers	_____
	Semi-auto fill system	O **Yes / No**
	Time to fill all chambers	_____ **seconds**
Endurance Trials: **X = gallons or Litres**	**Fuel consumption**	
	Port & Starboard Motor: at cruise:	_____X/hr @_____rpm
	Port & Starboard Motor: at full throttle:	_____X/hr @_____rpm
Steering: Acceptable Y /N	Straight line	O **Yes / No**
	Hard-Port radius of turn. Full Throttle	_____ **feet**
	Hard-Stbd radius of turn. Full Throttle	_____ **feet**
	Lock to lock = 35 degrees pt. & stbd	O **Yes / No**
	Effective steering 0-5 knots	O **Yes / No**
	5-10 knots	O **Yes / No**
	20-30 knots	O **Yes / No**
	Full speed	O **Yes / No**

Outboard/Inboard Leg Trim Control:	From fully raised to fully lowered.	O **Acceptable Yes / No**
Trim Tab Operation:	Fully raised, fully lowered.	O **Acceptable Yes / No**
Engine Controls:	Start	O **Issues, Yes / No**
	Shift	O **Issues, Yes / No**
	Throttle	O **Acceptable Yes / No**
Engine Gauges:	Tachometer	O **Acceptable Yes / No**
	Fuel gauges	O **Acceptable Yes / No**
	Trim gauges	O **Acceptable Yes / No**
	Oil pressure	O **Acceptable Yes / No**
Engine Gauges:	Voltmeter	_____ **volts**
Cabin Sound Levels:	Cruising speed- door & windows closed	_____dbA @ _____rpm
	Cruising speed- door & windows open	_____dbA @ _____rpm
	Full speed- door & windows closed	_____dbA @ _____rpm
	Full speed- door and windows open	_____dbA @ _____rpm
Outboard/Inboard engine operation:	Starting	O **Acceptable Yes / No**
	Shifting	O **Acceptable Yes / No**
	Throttle	O **Acceptable Yes / No**
	Raise	O **Acceptable Yes / No**
	Lower	O **Acceptable Yes / No**

Loaded Vessel Drop Test:	**If applicable**	O **Acceptable Yes / No**
Lifting Bridle Certified:	**If applicable**	O **Acceptable Yes / No**
Rollover test	**If applicable**	O **Acceptable Yes / No**

NOTES

Beaufort Wind Scale Identifier

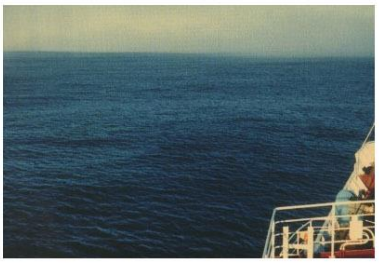
Force	Wind Speed		Descriptive Term	Effects Observed at Sea	Effects Observed on Land
	Km/h	Knots			
0	Less than 1	Less than 1	Calm	Sea surface like a mirror, but not necessarily flat.	Smoke rises vertically.
1	1 - 5	1 - 3	Light air	Ripples with the appearance of scales are formed, but without foam crests.	Direction of wind shown by smoke drift, but not wind vanes.
2	6 - 11	4 - 6	Light breeze	Small wavelets, still short but more pronounced. Crests do not break. When visibility good, horizon line always very clear.	Wind felt on face. Leaves rustle. Ordinary vane moved by wind.
3	12 - 19	7 - 10	Gentle breeze	Large wavelets. Crests begin to break. Foam of glassy appearance. Perhaps scattered whitecaps.	Leaves and small twigs in constant motion. Wind extends light flag.
4	20 - 28	11 - 16	Moderate breeze	Small waves, becoming longer. Fairly frequent whitecaps.	Raises dust and loose paper. Small branches are moved.
5	29 - 38	17 - 21	Fresh breeze	Moderate waves, taking a more pronounced long form. Many whitecaps are formed. Chance of some spray.	Small trees with leaves begin to sway. Crested wavelets form on inland waters.
6	39 - 49	22 - 27	Strong breeze	Large waves begin to form. The white foam crests are more extensive everywhere. Probably some spray.	Large branches in motion. Whisteling heard in telephone wires. Umbrellas used with difficulty.
7	50 - 61	28 - 33	Near gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Whole trees in motion. Inconvenience felt in walking against wind.
8	62 - 74	34 - 40	Gale	Moderately high waves of greater length. Edges of crests begin to break into the spindrift. The foam is blown in well-marked streaks along the direction of the wind.	Breaks twigs off trees. Generally impedes progress. Walking into wind almost impossible.
9	75 - 88	41 - 47	Strong gale	High waves. Dense streaks of foam along the direction of the wind. Crests of waves begin to topple, tumble and roll over. Spray may affect visibility.	Slight structural damage occurs, e.g. roofing shingles may become loose or blow off.
10	89 - 102	48 - 55	Storm	Very high waves with long overhanging crests. Dense white streaks of foam. Surface of the sea takes a white appearance. The tumbling of the sea becomes heavy and shock-like. Visibility affected.	Trees uprooted. Considerable structural damage occurs.
11	103 - 117	56 - 63	Violent storm	Exceptionally high waves. Sea completely covered with long white patches of foam. Visibility affected.	Widespread damage.
12	118 - 133	64 - 71	Hurricane	Air filled with foam and spray. Sea entirely white with foam. Visibility seriously impaired.	Rare. Severe widespread damage to vegetation and significant structural damage possible.

BEAUFORT FORCE 0
WIND SPEED: LESS THAN 1 KNOT

SEA: SEA LIKE A MIRROR

BEAUFORT FORCE 1
WIND SPEED: 1-3 KNOTS

SEA: WAVE HEIGHT .1M (.25FT), RIPPLES WITH THE APPEARANCE OF SCALES, BUT WITHOUT FOAM CRESTS

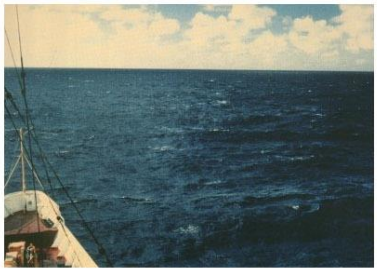


BEAUFORT FORCE 2
WIND SPEED: 4-6 KNOTS

SEA: WAVE HEIGHT .2-.3M (.5-1FT), SMALL WAVELETS, CRESTS HAVE A GLASSY APPEARANCE AND DO NOT BREAK

BEAUFORT FORCE 4
WIND SPEED: 11-16 KNOTS

SEA: WAVE HEIGHT 1-1.5M (3.5-5FT), SMALL WAVES BECOMING LONGER, FAIRLY FREQUENT WHITE HORSES



BEAUFORT FORCE 5
WIND SPEED: 17-21 KNOTS

SEA: WAVE HEIGHT 2-2.5M (6-8FT), MODERATE WAVES TAKING MORE PRONOUNCED LONG FORM, MANY WHITE HORSES, CHANCE OF SOME SPRAY

BEAUFORT FORCE 6
WIND SPEED: 22-27 KNOTS

SEA: WAVE HEIGHT 3-4M (9.5-13 FT), LARGER WAVES BEGIN TO FORM, SPRAY IS PRESENT, WHITE FOAM CRESTS ARE EVERYWHERE

BEAUFORT FORCE 7
WIND SPEED: 28-33 KNOTS

SEA: WAVE HEIGHT 4-5.5M (13.5-19 FT), SEA HEAPS UP, WHITE FOAM FROM BREAKING WAVES BEGINS TO BE BLOWN IN STREAKS ALONG THE WIND DIRECTION

BEAUFORT FORCE 8
WIND SPEED: 34-40 KNOTS

SEA: WAVE HEIGHT 5.5-7.5M (18-25FT), MODERATELY HIGH WAVES OF GREATER LENGTH, EDGES OF CREST BEGIN TO BREAK INTO THE SPINDRIFT, FOAM BLOWN IN WELL MARKED STREAKS ALONG WIND DIRECTION.

BEAUFORT FORCE 9
WIND SPEED: 41-47 KNOTS

SEA: WAVE HEIGHT 7-10M (23-32FT), HIGH WAVES, DENSE STREAKS OF FOAM ALONG DIRECTION OF THE WIND, WAVE CRESTS BEGIN TO TOPPLE, TUMBLE, AND ROLL OVER. SPRAY MAY AFFECT VISIBILITY.

BEAUFORT FORCE 10
WIND SPEED: 48-55 KNOTS

SEA: WAVE HEIGHT 9-12.5M (29-41FT), VERY HIGH WAVES WITH LONG OVERHANGING CRESTS, THE RESULTING FOAM, IN GREAT PATCHES, IS BLOWN IN DENSE WHITE STREAKS ALONG WIND DIRECTION. ON THE WHOLE, SEA SURFACE TAKES A WHITE APPEARANCE, TUMBLING OF THE SEA IS HEAVY AND SHOCK-LIKE, VISIBILITY AFFECTED.

BEAUFORT FORCE 11
WIND SPEED: 56-63 KNOTS

SEA: WAVE HEIGHT 11.5-16M (37-52FT), EXCEPTIONALLY HIGH WAVES, SMALL-MEDIUM SIZED SHIPS MAY BE LOST TO VIEW BEHIND THE WAVES. SEA COMPLETELY COVERED WITH LONG WHITE PATCHES OF FOAM LYING ALONG WIND DIRECTION. EVERYWHERE, THE EDGES OF WAVE CRESTS ARE BLOWN INTO FROTH.

BEAUFORT FORCE 12
WIND SPEED: 64 KNOTS

SEA: SEA COMPLETELY WHITE WITH DRIVING SPRAY, VISIBILITY VERY SERIOUSLY AFFECTED. THE AIR IS FILLED WITH FOAM AND SPRAY

APPENDIX B

Final Deliverable Data Package

The Final Data Package which must be delivered to Canada is as defined in the Contract, but must include, as a minimum the technical publications identified in this appendix.

1.0 Comprehensive Owner/Operator Manuals

1.1 Deliverables

1.1.1 One (1) complete hard copy and one (1) complete USB stick electronic copy set of the manuals per vessel delivered for the operator of each vessel, to be delivered with the vessel.

1.1.2 One (1) complete hard copy and one (1) complete USB stick electronic copy set of the manuals per vessel delivered for the Technical Authority, to be delivered to the same address identified for invoices.

1.2 Content

The manuals must provide a physical and functional description of the craft, it's machinery and equipment, as well as delivery testing and sea trial result documentation. The manuals must include as a minimum the following three sections and as detailed below:

- General Information
- Technical Information
- Spare Parts List

1.2.1 GENERAL INFORMATION SECTION

The General Information Section must include a description of the arrangement and function of all structures, systems, fittings and accessories that comprise the boat, with illustrations as appropriate:

1.2.1.1 Operating procedures;

1.2.1.2 Basic operating characteristics (such as temperatures, pressures, flow rates)

1.2.1.3 Installation criteria and drawings, assembly and disassembly instructions with comprehensive illustrations showing each step;

1.2.1.4 Recommended planned maintenance; and

1.2.1.5 Complete troubleshooting procedures.

1.2.2 TECHNICAL INFORMATION SECTION

The Technical Information Section a complete set of detailed owner / operator instructions, drawings (Section 15), parts lists and supplemental data for all components of the boat (whether acquired from external sources or custom-manufactured).

1.2.2.1 "As Fitted", dimensioned drawings must be produced for manuals to record the vessel particulars:

1.2.2.1.1 Calculated lightship weight;

1.2.2.1.2 General arrangement, Plan Profile section views;

1.2.2.1.3 Structural drawings showing deck plan, a centerline profile and frame station construction details;
1.2.2.1.4 Detailed lines plan;
1.2.2.1.5 Drawing of the fuel and propulsion supply arrangement; and,
1.2.2.1.6 Drawing of the electrical supply and functions of the vessel.

1.2.2.2 Parts list must include the name, part number and serial number if applicable of the parts, items or components and must indicate the supplier (name, address, phone number, email address) of this part, equipment or component and in which part of the specification the item appears.

1.2.2.3 Hull Serial Number (HIN), copy of builders plate, TEST and TRIAL results as per completed Attachment 1 of Appendix II, serial or manufacturer's numbers, and equipment warranty cards.

1.2.2.4 Engine(s) and equipment: including engine and propulsion serial numbers.

1.2.2.5 If applicable, collars; including collar material and glue materials and procedures necessary for onboard repair of the collar.

1.2.2.6 Acceptance Certificates, and compliance sheets or certificates distributed with equipment i.e. life-saving appliances, lifting appliances, engine test reports, calibration certificates, Nav light certificates, Fire suppression material certificates, flotation foam rating sheets

1.2.2.7 Pre-trial shop Testing Check Sheet.

1.2.2.8 Electronics, (if applicable): including model and serial numbers.

1.2.2.9 Regulatory and Stability documentation: as required per TP 1332, which, references ISO12217 or ISO 6185 for RIBs (if applicable).

1.2.3 SPARE PARTS LIST SECTION

The Spare Parts List section must include a list of recommended initial onboard spare parts to be stocked for the vessel. The list must include the name, part number and serial number if applicable of the parts, items or components and must indicate the supplier (name, address, phone number, email address) of this part, equipment or component and in which part of the TSOR the item appears. At a minimum this list must include the following items (as applicable):

1.2.3.1 Propulsion: Propellers, filters, water pump impeller, batteries, throttle and shift cables, special engine tools.

1.2.3.2 Electrical: panel breakers, fuses, light bulbs;

1.2.3.3 Boat Structures and Fittings: Miscellaneous commonly used fasteners.

2.0 ADDITIONAL DELIVERABLE DOCUMENTATION

2.1.1 The following additional documentation must be supplied in both sets of Technical publication manuals delivered (defined in 8.4.2):

2.1.1.1 Tonnage Registration Certificate in accordance with TP 13430 - http://www.tc.gc.ca/eng/marinesafety/svcp-gt-3948.htm ;

2.1.1.2 Registration to the Small Vessel Compliance Program (SVCP) Website: http://www.tc.gc.ca/eng/marinesafety/svcp-menu-3633.htm ;

2.1.1.3 Two (2) Bill of Sales, one (1) for the vessel and one (1) for the trailer;
2.1.1.4 Test & Trial results as required by Appendix A;
2.1.1.5 Acceptance Certificates, i.e. life-saving appliances, lifting appliances, engine test reports, calibration certificates, extinguishers, etc;
2.1.1.6 A valid Motor Vehicle Registration Certificate for the relevant Province, for the trailer; and
2.1.1.7 All testing check sheets created and completed by the builder.