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**SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise
indicated, all other terms and conditions of the Solicitation
remain the same.

Ce document est par la présente révisé; sauf indication contraire,
les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

TPSGC/PWGSC

1550 Avenue d'Estimauville

Québec

Québec

G1J 0C7

Title - Sujet Cale sèche de trois navires cl.MSPV	
Solicitation No. - N° de l'invitation F3065-201010/B	Amendment No. - N° modif. 008
Client Reference No. - N° de référence du client F3065-201010	Date 2020-11-12
GETS Reference No. - N° de référence de SEAG PW-\$QCV-018-18005	
File No. - N° de dossier QCV-0-43085 (018)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM Eastern Standard Time EST on - le 2020-11-25 Heure Normale du l'Est HNE	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Piras, Gabriel	Buyer Id - Id de l'acheteur qcv018
Telephone No. - N° de téléphone (418) 956-2350 ()	FAX No. - N° de FAX (418) 648-2209
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
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

**TITLE : CCGS CAPORAL KAEBLE V.C., CCGS A. LEBLANC, CCGS CONSTABLE CARRIÈRE -
DRYDOCK REFITS - 2020-2021
Amendment 008**

Included in the present amendment :

1. Modifications #5 and #6 Specifications
2. Modification #6 to the bid solicitation

MODIFICATIONS #5 AND #6 TO SPECIFICATIONS

The Specifications are amended as follows :

#5 Table of Contents

Insert : "12.6 RENEW THE BOW THRUSTER FOOT".

#6 Section 12.0 "PROPULSION SYSTEM AND MANEUVER"

Insert : Section "12.6 RENEW THE BOW THRUSTER FOOT" attached at the end of this document.

MODIFICATION #4 TO THE BID SOLICITATION

ANNEX I - FINANCIAL BID PRESENTATION SHEET – of the bid solicitation is amended as follows:

Delete : "Appendix 1 of Annex I – Price per Item Sheet" in its entirety.

Insert : The "Appendix 1 of Annex I – Price per Item Sheet" provided below.

For your convenience, here is the list of modifications:

1. Add 12.6 (1.1 Scheduled Work)

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

Appendix 1 of Annex I – Price per Item Sheet

1. Prix par article

1.1 Scheduled Work

Specification Section	Description	Firm price for each ship		
		Caporal Kaëble V.C.	A. Leblanc	Constable Carriere
G 1.0	GENERAL (Bidders can enter \$0.00 or leave the field blank if the fees for this item is distributed in each of the items bellow. In case the fees are not distributed an amount must be indicated in the price box.)	\$ _____	\$ _____	\$ _____
S 1.0	SERVICES Price Excluding sub item(s) below. (Bidders can enter \$0.00 or leave the field blank if the fees for this item are distributed in each of the items bellow. In case the fees are not distributed an amount must be indicated in the price box.)	\$ _____	\$ _____	\$ _____
	S1.5.9 Electrical power - 100 000 kilowatt-hours. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
10	SAFETY AND SECURITY			
10.1	Certification of Fuel Hoses	Optional Work	Optional Work	Optional Work
10.2	Portable Extinguishers Inspection	Optional Work	Optional Work	Optional Work
10.3	Fire Detection System	Optional Work	Optional Work	Optional Work
10.4	Annual Inspection of the Fixed Fire Fighting System	Optional Work	Optional Work	Optional Work
10.5	Annual Certification of the Rescue Boat	Optional Work	Optional Work	Optional Work
10.6	Emergency Bilge Ejection Maintenance	Optional Work	Optional Work	Optional Work
10.8	Through Hull Fitting Survey	\$ _____	\$ _____	\$ _____
11	HULL AND STRUCTURE			
11.1	Docking and Undocking (ABS Survey) Price Excluding sub item(s) below. Price excluding the optional item(s) in section "1.2 Optional Scheduled Work", below.	\$ _____	\$ _____	\$ _____
	11.1.C.16 10 hours (non-continuous) of man-lift services. Final amount will be prorated.	\$ _____	\$ _____	\$ _____

Specification Section	Description	Firm price for each ship		
		Caporal Kaeble V.C.	A. Leblanc	Constable Carriere
	11.1.C.23 One additional lot of 50 thickness measurements. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
11.2	Inspection of Hull and Welding repairs Price Excluding sub item(s) below.	\$ _____	\$ _____	\$ _____
	11.2.C.2.2 10 m of welding of the butt welding and continuous welding to be replaced Final amount will be prorated.	\$ _____	\$ _____	\$ _____
	11.2.C.3.1 For the repair by cladding: Price per one hundred holes with a diameter of 15 mm to be filled Final amount will be prorated.	\$ _____	\$ _____	\$ _____
	11.2.D.1.2 Production of 8 x-ray films of the welds. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
	11.2.D.1.2 8 Ultrasounds. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
11.3	Hull Painting Price Excluding sub item(s) below. Price excluding the optional item(s) in section "1.2 Optional Scheduled Work", below.	\$ _____	\$ _____	\$ _____
	11.3.C.5.1 Preparation and coating of 50 square meters of hull area. NOTE: This area must include the area of the two rudders. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
	11.3.C.7 Temporary shelter covering the entire hull area of the ship to be painted. <u>OR</u> The temporary shelter can be provided if requested. Installation and shipping will be at the contractor's expense and any damage must be repaired. The containers (x2) are located in Prescott.	\$ _____	\$ _____	\$ _____
	11.3.D.2.1 10 non-destructive tests. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
11.4	Anodes	\$ _____	\$ _____	\$ _____
11.5	Bilge Inspection Preparation and painting; Price for 10 square meters. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
11.6	Fuel Tank Inspection Price Excluding sub item(s) below. (Price excluding the optional item(s) in section "1.2 Optional Scheduled Work", below.)	\$ _____	\$ _____	\$ _____
	11.6.C.1.1 10 extra measurements. Final amount will be prorated.	_____ \$	_____ \$	_____ \$

Specification Section	Description	Firm price for each ship		
		Caporal Kaeble V.C.	A. Leblanc	Constable Carriere
11.7	Steel Repair Frame 27-31 Port Potable Water Price Excluding sub item(s) below.	N/A	N/A	\$ _____
	11.7.C.3.1 2 m2 section of steel repair. Any additional area will be priced through a 1379 form.	N/A	N/A	\$ _____
11.8	Sewage Sludge Tank, Black Water Tank, Bilge Water Tank, Grey Water Tank, Dirty Oil & Sludge Tank, Lube Oil Tank Price Excluding sub item(s) below.	\$ _____	\$ _____	\$ _____
	11.8.C.1.4 Removal of 200 liters of liquid waste and 20 liters of solid waste for an estimated total of 220 liters from the Dirty Oil & Sludge Tank (Tank #15). Final amount will be prorated.	\$ _____	\$ _____	\$ _____
	11.8.C.1.7 Removal and disposal of 100 liters of liquid waste and 20 liters of solid waste for an estimated total of 120 liters from the Sewage Sludge tank (#6). Final amount will be prorated.	\$ _____	\$ _____	\$ _____
	11.8.C.1.9 Removal and disposal of 100 liters of liquid waste and 15 liters of solid waste for an estimated total of 115 liters from the tanks #7a and #7b. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
	11.8.C.2.1 Preparation and coating of 5 square meters of surface area in the Dirty Oil Tank. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
	11.8.C.3.1 Preparation and coating of 10 square meters of surface area in the Sewage Sludge Tank the Black Water Tank , Grey Water Tank, Bilge Water Tank, Dirty Oil & Sludge Tank. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
	11.8.C.4 Lube oil Tank	\$ _____	\$ _____	\$ _____
11.9	Potable Water Tanks Price Excluding sub item(s) below.	\$ _____	\$ _____	\$ _____
	11.9.C.2.2 Touch up and repair of 10 square meters of surface are between the two tanks and this area must include the feathered areas into the existing coating system. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
11.10	Ballast Water Tank Inspection Price Excluding sub item(s) below.	\$ _____	\$ _____	\$ _____
	11.10.C.2.2 Touch up and repair of 5 square meters of surface are between the two ballast tanks and this area must include the feathered areas into the existing coating system. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
11.11	Air Tank Inspection Price Excluding sub item(s) below.	\$ _____	\$ _____	\$ _____

Specification Section	Description	Firm price for each ship		
		Caporal Kaeble V.C.	A. Leblanc	Constable Carriere
	11.11.C.4 Area of 2 m2 per tank for 3 tanks to be prepared and repainted – Total of 6 m2. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
11.12	Pillar Replacements	\$ _____	N/A	\$ _____
11.14	Installation of Main Deck and Bridge Deck Hatch	Optional Work	Optional Work	Optional Work
11.15	Floor Repair	Optional Work	Optional Work	Optional Work
11.16	Stbd Aft Hull Corner to be replaced	Optional Work	Optional Work	\$ _____
11.17	Relocate Through Hull Fitting before frame 40	\$ _____	Optional Work	Optional Work
11.18	Renew Through Hull Fitting at STBD frame 31	\$ _____	Optional Work	Optional Work
11.19	Renew Through Hull Fitting at Port Frame 31	\$ _____	Optional Work	Optional Work
11.20	Renew Through Hull Fitting at STBD frame 31	\$ _____	Optional Work	Optional Work
11.21	Reinforce the Aft Transom Corners	\$ _____	N/A	\$ _____
11.22	Fix the Rubber Fendering	\$ _____	Optional Work	Optional Work
11.23	Fix the Drain for the Chain Locker Hatch	\$ _____	N/A	\$ _____
11.24	Forepeak Hatch	\$ _____	N/A	\$ _____
11.25	Simrad Echo Sounder Replacement	\$ _____	\$ _____	N/A
11.26	Chain Locker Inspection Price Excluding sub item(s) below.	\$ _____	\$ _____	\$ _____
	11.26.C.4 Replacing 5 m² of the chain locker coating. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
11.27	Sea Chest Maintenance	\$ _____	\$ _____	\$ _____
12	PROPULSION SYSTEM AND MANEUVER			
12.1	Propeller Shaft Seals Bearing and Shaft Clearances	N/A	\$ _____	\$ _____
12.2	Rudders and Bearings Inspection	\$ _____	\$ _____	\$ _____
12.3	Bow Thruster Gear Oil and Seal Change	\$ _____	\$ _____	\$ _____
12.4	Rope Cutter Blade Maintenance	\$ _____	\$ _____	\$ _____
12.5	Propeller Hubs, Shaft Clearances and Shaft Seals Price Excluding sub item(s) below.	\$ _____	Optional Work	Optional Work
	12.5.C.4 Propeller Shaft Inspection	\$ _____	Optional Work	Optional Work

Specification Section	Description	Firm price for each ship		
		Caporal Kaeble V.C.	A. Leblanc	Constable Carriere
	12.5.C.8 Optional OD Box inspection	\$ _____	Optional Work	Optional Work
12.6	Renew the Bow Thruster Foot	N/A	N/A	\$ _____
13	ELECTRICITY PRODUCTION			
13.1	Annual Maintenance of Generator Alternators	Optional Work	Optional Work	Optional Work
14	ELECTRICAL DISTRIBUTION			
14.1	Maintenance of circuit breakers	Optional Work	Optional Work	Optional Work
15	AUXILIARY SYSTEMS			
15.1	Sea Trials (Price excluding the optional item(s) in section "1.2 Optional Scheduled Work", below.)	\$ _____	\$ _____	\$ _____
16	DOMESTIC SYSTEMS			
16.1	Refrigeration Systems Maintenance	Optional Work	Optional Work	Optional Work
16.2	HVAC (Canceled)	N/A	N/A	N/A
16.3	General Welding	Optional Work	Optional Work	Optional Work
17	DECK EQUIPMENT			
17.1	Windlass	Optional Work	Optional Work	Optional Work
17.2	Removal and Reinstallation of Jettisonable Tanks and Painting	Optional Work	Optional Work	Optional Work
17.3	Anchor and Chain Inspection	\$ _____	\$ _____	Optional Work
18	COMMUNICATION AND NAVIGATION SYSTEMS			
18.1	Ship Radio Inspection	Optional Work	Optional Work	Optional Work
19	CONTROL SYSTEMS			
19.1	N/A	N/A	N/A	N/A
Scheduled Work – TOTAL FIRM PRICE [Sum of the Firm Prices above] :		\$ _____ (1.1)	\$ _____ (1.3)	\$ _____ (1.5)

1.2 Optional Scheduled Work

Specification Section	Description	Firm price for each ship		
		Caporal Kaeble V.C.	A. Leblanc	Constable Carriere

Specification Section	Description	Firm price for each ship		
		Caporal Kaeble V.C.	A. Leblanc	Constable Carriere
10	SAFETY AND SECURITY			
10.1	Certification of Fuel Hoses	\$ _____	\$ _____	\$ _____
10.2	Portable Extinguishers Inspection	\$ _____	\$ _____	\$ _____
10.3	Fire Detection System	\$ _____	\$ _____	\$ _____
10.4	Annual Inspection of the Fixed Fire Fighting System	\$ _____	\$ _____	\$ _____
10.5	Annual Certification of the Rescue Boat	\$ _____	\$ _____	\$ _____
10.6	Emergency Bilge Ejection Maintenance	\$ _____	\$ _____	\$ _____
11	HULL AND STRUCTURE			
	11.1.E.3 Price for storing the vessel during <u>two weeks</u> . Final amount will be prorated.	_____ \$	_____ \$	_____ \$
	11.3.C.6.3 and 11.3.C.8.8 Preparation and coating of the entire hull area – below and above water line. [Firm price for the Work] x [Probability factor of 0,1] [Price for bid evaluation purpose]	\$ _____ x 0,1 \$ _____	\$ _____ x 0,1 \$ _____	\$ _____ x 0,1 \$ _____
	11.3.C.9 Draft Marks and Markings	\$ _____	N/A	\$ _____
	11.3.C.10 Draft Marks and Markings	\$ _____	\$ _____	\$ _____
	11.6.C.2 Pressure testing of <u>one</u> tank	\$ _____	\$ _____	\$ _____
	11.10.D.2.1 Hydro test on the ballast water tanks.	\$ _____	\$ _____	\$ _____
	11.10.D.2.2 Pneumatic test on the ballast water tanks.	\$ _____	\$ _____	\$ _____
11.14	Installation of Main Deck and Bridge Deck Hatch	\$ _____	\$ _____	\$ _____
11.15	Floor Repair- replace the flooring in the Fridge and Freezer room Price Excluding sub item(s) below.	\$ _____	\$ _____	\$ _____
	11.15.F.1 Work in addition of the Work in the Fridge and Freezer room for different rooms - 62,5 square feet. Final amount will be prorated.	\$ _____	\$ _____	\$ _____
11.16	Stbd Aft Hull Corner to be replaced	\$ _____	\$ _____	N/A
11.17	Relocate Through Hull Fitting before frame 40	N/A	\$ _____	\$ _____
11.18	Renew Through Hull Fitting at STBD frame 31	N/A	\$ _____	\$ _____
11.19	Renew Through Hull Fitting at Port Frame 31	N/A	\$ _____	\$ _____
11.20	Renew Through Hull Fitting at STBD frame 31	N/A	\$ _____	\$ _____

Specification Section	Description	Firm price for each ship		
		Caporal Kaeble V.C.	A. Leblanc	Constable Carriere
11.22	Fix the Rubber Fendering	N/A	\$ _____	\$ _____
12	PROPULSION SYSTEM AND MANEUVER			
12.5	Propeller Hubs, Shaft Clearances and Shaft Seals Price Excluding sub item(s) below.	N/A	\$ _____	\$ _____
	12.5.C.4 Propeller Shaft Inspection	N/A	\$ _____	\$ _____
	12.5.C.8 Optional OD Box inspection	N/A	\$ _____	\$ _____
13	ELECTRICITY PRODUCTION			
13.1	Annual Maintenance of Generator Alternators	\$ _____	\$ _____	\$ _____
14	ELECTRICAL DISTRIBUTION			
14.1	Maintenance of circuit breakers	\$ _____	\$ _____	\$ _____
15	AUXILIARY SYSTEMS			
15.1.C.3	Providing tug escort for 2 hours to escort the vessel to sea trials	\$ _____	\$ _____	\$ _____
16	DOMESTIC SYSTEMS			
16.1	Refrigeration Systems Maintenance	\$ _____	\$ _____	\$ _____
16.3	General Welding Provide certified welding labor in order to perform aluminum and steel welding repairs outside ship. Any repairs deemed necessary by the TA/IA over the duration of the drydock/refit period (50 hours). Final amount will be prorated.	\$ _____	\$ _____	\$ _____
17	DECK EQUIPMENT			
17.1	Windlass	\$ _____	\$ _____	\$ _____
17.2	Removal and Reinstallation of Jettisonable Tanks and Painting	\$ _____	\$ _____	\$ _____
17.3	Anchor and Chain Inspection	N/A	N/A	\$ _____
18	COMMUNICATION AND NAVIGATION SYSTEMS			
18.1	Ship Radio Inspection	\$ _____	\$ _____	\$ _____
19	CONTROL SYSTEMS			
19.1	N/A	N/A	N/A	N/A
Optional Scheduled Work – TOTAL FIRM PRICE [Sum of the Firm Prices above] :		\$ _____ (1.2)	\$ _____ (1.4)	\$ _____ (1.6)

Solicitation No. - N° de l'invitation
F3065-201010/B
Client Ref. No. - N° de réf. du client
F3065-201010

Amd. No. - N° de la modif.
008
File No. - N° du dossier
QCV-0-43085

Buyer ID - Id de l'acheteur
qcv018
CCC No./N° CCC - FMS No/ N° VME

Remark to Bidders:

1. Canada reserves the right to exercise all the options or partial options.
2. Canada may reject the bid if any of the prices submitted do not reasonably reflect the cost of performing the part of the work to which that price applies.

12.6 RENEW THE BOW THRUSTER FOOT

12.6.A Identification

12.6.A.1 The Contractor must remove the bow thruster foot and send it to the manufacturer in California for refurbishing and Canada will keep it as a spare. A new one will be installed. A new Bow Thruster foot must be installed by the Contractor.

12.6.B References

12.6.B.1 Equipment data

12.6.B.1.1 ABT TRAC 24-28.

12.6.B.2 Drawings

a) <https://abttrac.com/product/trac-hydraulic>

b) https://abttrac.com/sites/default/files/24-28%20Inch%20Hydraulic%20Thruster_1.pdf

12.6.B.2.2 See the installation manual.

12.6.B.3 Regulations and standards

12.6.B.3.1 The following Standards and Regulations apply to work carried out in this section. The Contractor must ensure all work completed in this section meets these Standards and Regulations as well as any other pertinent Federal/Territorial Regulation or Standard:

a) ABS, Rules & Regulations for the Classification of Special Service Craft, 2020;

b) Canada Shipping Act, 2001: Marine Machinery Regulations (SOR/90-264).

12.6.B.4 Equipment provided by the owner

12.6.B.4.1 A Government Furnished new Bow Thruster foot will be supplied to the Contractor for installation.

12.6.C Statement of Work

12.6.C.1 Equipment Removal

12.6.C.1.1 The bowthruster grid will be removed as per hull inspection section.

12.6.C.1.2 Both propellers must be dismantled for a later installation on the new foot. The Contractor must mark the propellers port and stbd for re-installation.

Propulsion et manoeuvre

- 12.6.C.1.3 The Contractor must drain the fluids for shipping.
- 12.6.C.1.4 The hydraulic connections must be blanked with metal caps and plugs.
- 12.6.C.1.5 The Contractor must remove the bowthruster foot section at the flange. There is a total of six mounting bolts and safety wire. Specific instruction manual will be provided during the work period. The gasket is fixed with RTV.
- 12.6.C.1.6 Instruction to disconnect can be found in manual.

12.6.C.2 Installation

- 12.6.C.2.1 Opposite steps of removal are to be followed. The Contractor must clean all surfaces, install a gasket with sealant, fasteners: a torque table is included in the manual that will be provided during the work period.
- 12.6.C.2.2 The Contractor must ensure the thruster is centered before the torquing the fasteners. All must be secured with safety wire.
- 12.6.C.2.3 New fluids will be provided by the Canadian coast guard and installed by the Contractor.

12.6.C.3 Packaging

- 12.6.C.3.1 The Contractor must package the old bowthruster foot for transport in a wooden box.

12.6.D Proof of Performance

12.6.D.1 Inspection Points

- 12.6.D.1.1 The Contractor must check for the propellers tips clearances before removal and after installation.
- 12.6.D.1.2 The Contractor must note in the report the quantity of gear oil in the system. A visual mark must be drawn on the header tank to show initial condition.

12.6.D.2 Testing and Trials

- 12.6.D.2.1 To be tested during Sea Trials.

12.6.E Deliverables

12.6.E.1 Documentation

- 12.6.E.1.1 All materials used must be in accordance with ABS Classification Society rules.

Propulsion et manoeuvre

12.6.E.1.2 An installation report must be provided before the end of the work period.

12.6.E.2 Training (N/A)

12.6 RENOUELER LE PIED DU PROPULSEUR D'ÉTRAVE

12.6.A Identification

12.6.A.1 L'entrepreneur doit retirer le pied du propulseur d'étrave, l'envoyer au fabricant en Californie pour remise à neuf et le Canada le conservera comme pièce de rechange. Un nouveau pied de propulseur d'étrave doit être installé par l'entrepreneur.

12.6.B Références

12.6.B.1 Données de l'équipement

12.6.B.1.1 ABT TRAC 24-28.

12.6.B.2 Dessins

- a) <https://abttrac.com/product/trac-hydraulic>
- b) https://abttrac.com/sites/default/files/24-28%20Inch%20Hydraulic%20Thruster_1.pdf

12.6.B.2.2 Voir le manuel d'installation.

12.6.B.3 Règlements et normes

12.6.B.3.1 Les normes et règlements suivants s'appliquent aux travaux exécutés dans cette section. L'entrepreneur doit s'assurer que tous les travaux exécutés dans cette section respectent ces normes et règlements ainsi que tout autre règlement ou norme fédérale / territoriale pertinente:

- a) ABS, règles et règlements pour la classification des embarcations de service spécial, 2020;
- b) Loi de 2001 sur la marine marchande du Canada: Règlement sur la machinerie maritime (SOR / 90-264).

12.6.B.4 Équipement fourni par le propriétaire

12.6.B.4.1 Un nouveau pied de propulseur d'étrave fourni par le gouvernement sera remis à l'entrepreneur pour installation.s

12.6.C Énoncé des travaux

12.6.C.1 Retrait de l'équipement

- 12.6.C.1.1 La grille du propulseur d'étrave sera retirée conformément à la section d'inspection de la coque.
- 12.6.C.1.2 Les deux hélices doivent être démontées pour une installation ultérieure sur le nouveau pied. L'entrepreneur doit marquer le babord et le tribord des hélices pour la réinstallation.
- 12.6.C.1.3 L'entrepreneur doit vidanger les fluides pour l'expédition.
- 12.6.C.1.4 Les raccords hydrauliques doivent être obturés avec des bouchons métalliques.
- 12.6.C.1.5 L'entrepreneur doit retirer la section du pied du propulseur d'étrave au niveau de la bride. Il y a un total de six boulons de montage et fil de sécurité. Un manuel d'instructions spécifique sera fourni pendant la période de travail. Le joint est fixé avec du RTV.
- 12.6.C.1.6 Les instructions de déconnexion se trouvent dans le manuel.

12.6.C.2 Installation

- 12.6.C.2.1 Les étapes de retrait inversées doivent être suivies.

12.6.C.3 Emballage

- 12.6.C.3.1 L'entrepreneur doit emballer l'ancien pied de propulseur d'étrave pour le transport dans une caisse en bois.

12.6.D Preuve de performance

12.6.D.1 Points d'inspection

- 12.6.D.1.1 L'entrepreneur doit vérifier le jeu aux extrémités des hélices avant le retrait et après la repose.
- 12.6.D.1.2 L'entrepreneur doit noter dans le rapport la quantité d'huile pour engrenages dans le système. Une marque visuelle doit être dessinée sur le réservoir collecteur pour montrer l'état initial.

12.6.D.2 Essais

- 12.6.D.2.1 À tester pendant les essais en mer.

12.6.E Produits livrables

12.6.E.1 Documentation

Propulsion et manoeuvre

12.6.E.1.1 Tous les matériaux utilisés doivent être conformes aux règles de la société de classification ABS.

12.6.E.1.2 Un rapport d'installation doit être fourni avant la fin des travaux.

12.6.E.2 Formation (N / A)