

**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**

## **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**  
Marine Machinery and Services / Machineries et  
services maritimes  
11 Laurier St. / 11, rue Laurier  
6C2, Place du Portage  
Gatineau  
Québec  
K1A 0S5

<b>Title - Sujet</b> BOW THRUSTER SYSTEM	
<b>Solicitation No. - N° de l'invitation</b> F7049-150111/A	<b>Amendment No. - N° modif.</b> 002
<b>Client Reference No. - N° de référence du client</b> F7049-150111	<b>Date</b> 2015-10-07
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$ML-035-25363	
<b>File No. - N° de dossier</b> 035ml.F7049-150111	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2015-10-27</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Daylight Saving Time EDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Tinkess, Dianne	<b>Buyer Id - Id de l'acheteur</b> 035ml
<b>Telephone No. - N° de téléphone</b> (819) 956-0178 ( )	<b>FAX No. - N° de FAX</b> (819) 956-0897
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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**This solicitation amendment 002 is raised to provide this question and answer set 1 and to provide attached drawings.**

**Question and Answer Set 1**

**Question 1.**

Clarification on the forecastle control station?

**Answer 1.**

Forecastle control station is the same as the local station.

**Question 2.**

What is the running current of the existing system?

**Answer 2.**

The current can reach 900 Amps in one direction, a little less in the opposite direction.

**Question 3.**

Is there a GA for the bridge console layout?

**Answer 3.**

Yes, if not already part of the package it will be added.

**Question 4.**

What is the main generator capacity?

**Answer 4.**

There are 3 main generators rated at 2100kW each. Typically the bow thruster would be in use with 2 or 3 generators on line.

**Question 5.**

Are the bolted blades a firm requirement?

**Answer 5.**

Yes

**Question 6.**

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Do we need to integrate the bridge controls to fit the existing consoles?

**Answer 6.**

Yes the controls must fit within the existing footprints. CCG may renew or replace the existing consoles, but nonetheless, the existing footprint is to be retained. See attached Drawings:

- 1a) M7066D-325A1 Port Wing & Stbd Wing Console General Arrangement
- 1b) M7066D-326A1 Port Wing Console Schematic Diagram
- 1c) M7066D-328A1 Stbd Wing Console Schematic Diagram

**Question 7.**

Can you clarify the location of the existing local controls?

**Answer 7.**

The local controls are being replaced. The existing controls are located in the forecastle on the aft side of the speed control enclosure.

**Question 8.**

Is cathodic protection required?

**Answer 8.**

Yes. Anodes are acceptable.

Post Meeting Note: Cathodic protection shall be supported by engineering calculations to ensure a 4 year protection without anode replacement.

**Question 9.**

Is the intention to reuse the existing cabling?

**Answer 9.**

Yes. The existing cables are (from both the Switchboard to the Drive and the Drive to the Motor): Three parallel cable runs of 3 x 500MCM each, so 3, 500MCM per phase.

**Question 10.**

Is it the intention to reuse the existing ventilation?

**Answer 10.**

Yes

**Question 11.**

What is the btu rating of the existing ventilation system?

**Answer 11.**

The existing system consists of a supply and exhaust fan, with ratings as detailed in Annex A. Bidders may calculate cooling requirements from this data.

**Question 12.**

Section 1.4 of Annex A requires the successful bidder to provide installation, testing, commissioning and trials, which will be provided through a separate contract with the shipyard. How will the pricing for this work be managed?

**Answer 12.**

This separate contract will require the shipyard to provide firm, fixed pricing for this work. By submitting a proposal on this solicitation, Bidders shall certify that they can negotiate firm pricing with the shipyards for this future work.

**Question 13.**

We would like some more information in regards to:

Annex A, Section 4.3.3 Bow Thruster Variable Frequency Drive VFD requirements

Can Canada supply to us the Generator Data from the ship. This would be the generator that supplies power to the switch board for the VFD / drive motors.

(we assume the Gen set are 2100kW and that means 2625kVA?)

**Answer 13.**

The Type 1100 is an AC/AC diesel electric vessel that is comprised of 3 Alco 251 engines coupled to 600V 60Hz General Electric synchronous generators rated at 2100kW each, 1 Caterpillar 3508 auxiliary engine coupled to a 600V 60 Hz Stamford generator rated at 500kW, and one Caterpillar 3406 emergency engine coupled to a 600V 60 Hz Stamford generator rated at 100kW. The power conversion for the vessel propulsion is achieved via two 600V/1100V 3400 kVA propulsion transformers feeding port and starboard cycloconverters that convert the incoming fixed AC into a +/- 18Hz 1900V 2800kW feed for each General Electric 3500 hp 12 pole synchronous motor.

Solicitation No. - N° de l'invitation

F7049-150111/A

Amd. No. - N° de la modif.

002

Buyer ID - Id de l'acheteur

035ml

Client Ref. No. - N° de réf. du client

F7049-150111

File No. - N° du dossier

035mlF7049-150111

CCC No./N° CCC - FMS No/ N° VME

Generator Data			
Manufacturer			
Serial Number	104479X	Voltage	600
Frame	6000	Current	2526
Model	139531	RPM	900
Type	ATI	Phase	3
Frequency	60	Power Factor	0.8
KVA	2625	Manufacturer Date	1984-06
Brushless Exciter (DC)			
KW			
Rated Amps	3.3	Min V / A (Cold)	41/ 1.4

**Question 14.**

Any Drawing and technical data you have on the **main switch board** providing power from the switch board to the starter cabinets for the Thruster VFD/Motors.

**Answer 14.**

Please refer to Attachment #12 entitled "**Attach 12 VNDJ2\_352-2\_ELECTRICAL SYSTEM ONE LINE DIAGRAM\_10F2.tif**" found within the supplemental information found on Buy and Sell under: **dsp.zip**  
<https://buyandsell.gc.ca/procurement-data/tender-notice/PW-ML-035-25363>

**Question 15.**

Annex A, Section 4.3.4 Operator control station requirements can Canada supply us with a general arrangement drawing of the Bridge Console Layout, port and starboard wings consoles.

**Answer 15.**

The bridge console GA entitled shall be available on the Buy and Sell website.

**Question 16.**

In the "statement of work" document, section 2.1.1 there is listed existing documentation. I would like to know how I can get this data.

**Answer 16.**

This information is also found on the Buy and Sell website under **dsp.zip**.

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**Question 17.**

I'd like to also raise another point; specified is a propeller with "bolt on" blades. Can an exception be considered to this point?

**Answer 17.**

No, it is a firm requirement to include bolted on blades.

Note:

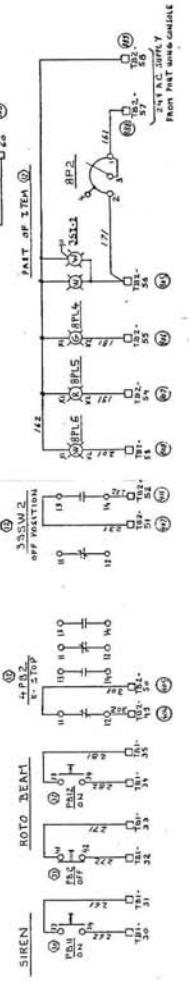
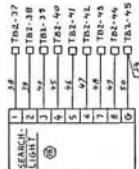
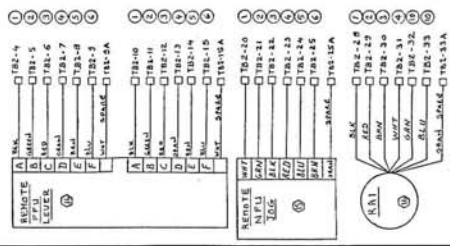
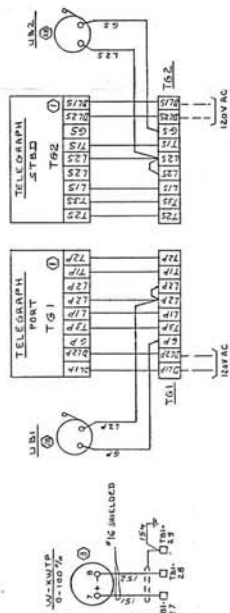
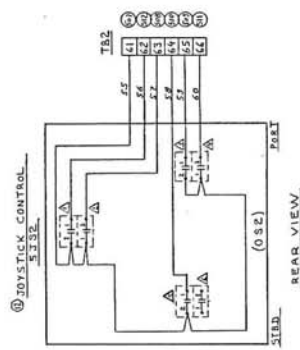
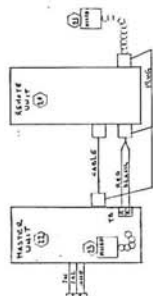
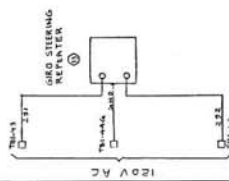
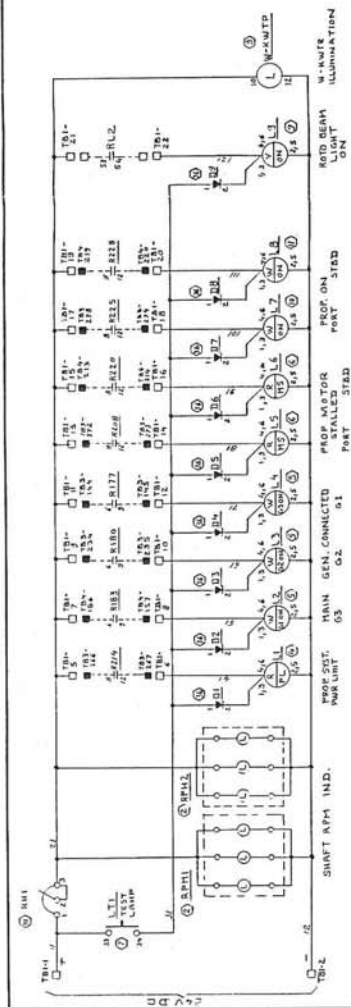
Bidders were reminded to follow the Bidders Instructions in the solicitation and if they have questions, they should not make assumptions or caveats.

SEARCHED	INDEXED	SERIALIZED	FILED	APR 11 1968	FBI - NEW YORK
FILED	INDEXED	SERIALIZED	FILED	APR 11 1968	FBI - NEW YORK
BEGARD GERRARD INDUSTRIES DIVISION OF THE GERRARD INTER LITE					
RECORDED					
UNITED STATES DEPARTMENT OF JUSTICE					
FEDERAL BUREAU OF INVESTIGATION					
WASHINGTON, D. C. 20535					





NO	REVISION	DATE
1	AS PER I.E.L. NO. Q. 11.1	15.10.73
2	FOR 15% PROFIT ON 15% WORKING	16.1.74
3	AT-ROLL SW. MODIFIED	15.4.77



☒ TR ON MSC CONSOLE  
☐ TR ON WING CONSOLE  
☐ SUPPLIER INFORMATION

WIRE TYPE: TEFLON \* 18 AWG BLACK  
UNLESS NOTED

Drawn	Tracy	Revised	By	DATE
Second	Concept	Revised	By	DATE
Third	Final	Revised	By	DATE
Fourth	As-Built	Revised	By	DATE
Fifth	As-Built	Revised	By	DATE

MARINE INDUSTRIES LIMITED  
NAVAT TYPE 100  
HULL 450-451  
STEEL WING CONSOLE  
SCHEMATIC DIAGRAM

SCALE