

ORDER FOR SUPPLIES OR SERVICES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 02/24/2009	2. CONTRACT NO. (If any) GS-23F-0342K	6. SHIP TO: Joe Poltrack		
3. ORDER NO. DTMA2F09008	4. REQUISITION/REFERENCE NO. PR SAR090235/0001	a. NAME OF CONSIGNEE DOT/Maritime Administration, South Atlantic Region		
5. ISSUING OFFICE (Address correspondence to) DOT/Maritime Administration, SAR Acquisition Office of Acquisition, MRG-7200 7737 Hampton Boulevard, Building 4D, Room 211 Norfolk VA 23505		b. STREET ADDRESS STATE OF MAINE Maine Maritime Academy		
		c. CITY Castine	d. STATE ME	e. ZIP CODE 04420

7. TO: a. NAME OF CONTRACTOR	f. SHIP VIA
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b. COMPANY NAME MARINE SYSTEMS CORPORATION		8. TYPE OF ORDER		
c. STREET ADDRESS 70 FARGO STREET		<input checked="" type="checkbox"/> a. PURCHASE	<input type="checkbox"/> b. DELIVERY - Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
d. CITY BOSTON	e. STATE MA	f. ZIP CODE 02210-2122	Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	

9. ACCOUNTING AND APPROPRIATION DATA 2009 - - X1750 - SMR 120 - SM - B107 - 0 - 0000 - 160000 - - - - 25711 - 6100 - 6600 -	10. REQUISITIONING OFFICE DOT/Maritime Administration, South Atlantic Region
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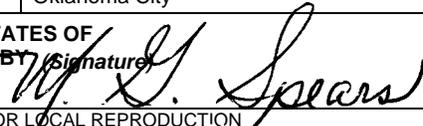
11. BUSINESS CLASSIFICATION (Check appropriate box(es))				12. F.O.B. POINT
<input checked="" type="checkbox"/> a. SMALL	<input type="checkbox"/> b. OTHER THAN SMALL	<input type="checkbox"/> c. DISADVANTAGED	<input checked="" type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED	Destination
<input type="checkbox"/> d. WOMEN-OWNED	<input type="checkbox"/> e. HUBZone	<input type="checkbox"/> f. EMERGING SMALL BUSINESS		

13. PLACE OF		14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	16. DISCOUNT TERMS
a. INSPECTION	b. ACCEPTANCE			

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	SEE LINE ITEM DETAIL					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT	19. GROSS SHIPPING WEIGHT	20. INVOICE NO.		17(h) TOT. (Cont. pages)
	21. MAIL INVOICE TO: Christy Remington				
	a. NAME DOT/ Enterprise Services Center (ESC) OFO/FAA, Oklahoma City				
	b. STREET ADDRESS (or P.O. Box) MARAD A/P Branch, AMZ-150 PO Box 25710				
	c. CITY Oklahoma City	d. STATE OK	e. ZIP CODE 73125	\$49,932.00	17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY 	23. NAME (Typed) Milton G. Spears TITLE: CONTRACTING/ORDERING OFFICER
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**ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION**

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 02/24/2009	CONTRACT NO. GS-23F-0342K	ORDER NO. DTMA2F09008
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ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	<p>DESIGN SERVICES</p> <p>Perform all work in the attached Performance Work Statement.</p> <p align="center"><i>Start Date</i> <i>End Date</i> 02/24/2009 07/15/2009</p> <p>Reference Requisition: PRSAR090235/0001</p>	1.00	JOB	49,932.000	49,932.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17i) ⇒ \$49,932.00

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COMMERCIAL CLAUSES

1 STATEMENT OF WORK

Develop Drawings and Specifications for Projects aboard T/S STATE OF MAINE

INTENT:

It is the intent of this Statement of Work (SOW) to provide all required drawings, specifications, documents and regulatory body (U.S.C.G. and ABS) approvals necessary for a contractor to perform the following installations and/or modifications:

- 1. Salt Water Cooling Cross Over Piping:** Installation of an 8", salt water cooling crossover line between the main and auxiliary salt water cooling systems.
- 2. Reverse Osmosis Unit:** Installation of a typical 60 ton per day reverse osmosis water maker.
- 3. Engine Platform and Gantry:** Installation of a platform alongside the main engine for landing various main engine parts during overhaul. Also; modification of existing gantry cranes to accommodate the transport of main engine parts.
- 4. Machine Shop Extension:** Modification of the existing machine shop to enlarge its area and to permit transport of main engine and other parts from the store room forward of the machine shop into the engine room.

LOCATION:

The Training Ship State of Maine is currently located pier side at the Maine Maritime Academy, Castine, ME 04421.

PERFORMANCE PERIOD:

This PWS can begin immediately after award and all requirements are to be accomplished by July 15, 2009. Access to the ship is possible only between award and April 15, 2009 and shall be from 0700 to 1700, Monday thru Friday exclusive of federal holidays. Access will not be permitted after April 15, 2009 as the ship and her crew will be involved with preparations for the yearly, summer training cruise.

PRELIMINARY DESIGN REVIEW:

A progress review of the design work shall be conducted at the Naval Architect's office when the design is 75% complete. The review will be attended by the Contracting Officer's Technical Representative (COTR) and other personnel associated with the vessel at the discretion of the COTR.

DESCRIPTION:

The contractor shall perform all design work, develop all specifications and drawings and obtain all ABS and USCG stamped approvals required for the accomplishment of projects #1 thru 4 below. This work shall include all structural and arrangement drawings, ship's piping and electrical systems drawings, modifications to the ship's Fire Plan, modifications to the vessel's trim & stability book, tank soundings book and Cargo Max stability program and any other drawing or document required to be developed, modified and/or approved by the regulatory agencies. If necessary, the contractor shall be required to resubmit revised drawings and specifications to satisfy regulatory questions and comments.

- 1. Salt Water Cooling Cross Over Piping:** Installation of an 8" pipe to interconnect the auxiliary salt water system (on the stbd side) to the main engine cooling system (on the port side) so that both systems can service the other in the event of failure of one system. There are existing flanges in the piping of both salt water systems. It is the intention of this item to install a valve at each flange and to run the piping between the two valves. It appears that the piping could be run in the overhead of the lower level at the forward bulkhead without running in to a lot of interferences. There are existing pipe supports spaced approximately 8 to 10 ft apart in this area which could be considered for hanging of the new pipe if they prove to be of sufficient strength. If installed in the overhead as described, it will be necessary to insulate the piping to prevent condensation from raining down on equipment.

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2. Reverse Osmosis Unit: Installation of a typical 60 ton per day Reverse Osmosis Unit (RO). (A specific RO unit has not yet been chosen.) The piping connections needed are the sea suction, brine overboard, filter backwash piping and product (potable water) outlet. Installation of the unit without the requirement to make new penetrations in the hull is preferred. There is available sea suction in the bilge from an existing 3" flanged connection off of a 5" sea suction line. It is believed that the brine overboard could be piped through an existing, unused, 4", 150# bronze, skin valve located where the RO unit would be placed. These piping sizes mentioned would be sufficient for most, if not all, of the reverse osmosis units manufactured today of approximately 60 ton per day. Particular attention should be given to the location of sewage discharges, oily water separator overboards, etc. relative to the to the reverse osmosis unit sea suction. Sufficient electrical power is available within 4 feet of where the RO would be installed. For electrical estimating purposes, a 60 ton reverse osmosis unit would be approximately 33 horsepower. The proposed location for the reverse osmosis unit is in the engine room at the 23 foot level and outboard of the port side SSDGs.

3. Engine Platform and Gantry: Installation of a new platform alongside the main engine. The existing platform (approximately 110" x 221") makes removals of cylinder heads, liners, etc. extremely difficult due to its height relative to the gantry above and the engine alongside. The platform and relative heights were designed for the original Enterprise engines not the existing MAK engine. The platform is used to land the heads, liners, pistons, rods, etc. from the main engine. Particular attention must be given to the various weights and dimensions of engine parts removed and stored on the platform. For these particulars, the vessels Chief Engineer should be consulted. In addition, there is a hinged catwalk which permits access to the turbocharger. This hinged platform or something similar to it will have to be present in the new design to permit access to the engine turbo charger. The existing platform is supported by 6, 4" pipe columns and numerous stiffeners. Approximately 8, lengths of ¼" stainless steel pressure gage tubing runs along these stiffeners and will have to be cut, shortened and new compression fittings installed. Some wiring is also involved but appears that it can be re-run without disconnecting. The new platform will be located alongside the main engine in the main machinery space (engine room). The gantry system located in and above the machine shop will also need to be modified due to the fact that this gear was designed for the smaller Enterprise parts and makes transport of the MAK parts extremely difficult. The vessel's Chief Engineer should be consulted regarding the route that various engine parts are moved. For these particulars, the vessels Chief Engineer should be consulted.

4. Machine Shop Extension: Modification of the existing machine shop to enlarge its area and to permit transport of main engine and other parts from the store room forward of the machine shop into the engine room. For these particulars, the vessel's Chief Engineer should be consulted.

REFERENCES:

1. Technical manuals and ship's drawings for as built and existing installations are available onboard vessel.
2. ABS Rules and Regulations, as applicable
3. US Coast Guard regulations, CFRs and NAVICs, as applicable
4. IEEE standards, as applicable
5. NFPA standards, as applicable
6. MARAD Baseline Specification Writing Guide
7. IMO rules and regulations, as applicable

GOVERNMENT PROVIDED MATERIALS:

All of the ship's drawings and manuals will be made available for referencing aboard ship. Removal of drawings and/or manuals for copying purposes may only be performed after receiving written approval from the ship's Chief Engineer.

DELIVERABLES:

At the completion of design, the following items are to be delivered to the COTR:

1. Three hardcopy sets of drawings.
2. Three hardcopy sets of specifications.
3. Three sets in hardcopy of a cost estimate broken down in detail showing labor, material, and equipment, profit and overhead for each of the four projects described in the SOW.
4. All of the above in electronic file format as appropriate using MS Word, MS Excel, and AutoCad 2000 or higher.

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The Contractor may submit invoices in either electronic or paper format. Electronic submission is preferred.

(1) Electronic invoices shall be addressed to MARADInvoices@faa.gov, with copy to MARADSARInvoices@dot.gov

Electronic invoices shall conform to the following criteria, or be subject to rejection:

- a. Invoice and supporting documentation shall be in Adobe Acrobat (pdf) format.
- b. The e-mail subject shall include the contract/purchase order number and invoice number.
- c. The transmitting e-mail shall include the following information: Name of the Contractor; Invoice date and number; Invoice amount; Contract number and, if applicable, the order or modification number; Terms of any discount for prompt payment offered; Payment instructions (i.e., financial institution, ABA routing #, account #)

(2) Paper invoices shall be submitted to one of the following addresses. Multiple copies are not required.

MARAD A/P SAR Invoices Branch
AMZ-150
PO Box 25710
Oklahoma City, OK 73125

If a street address is required for delivery (i.e., Federal Express), the following address may be used in lieu of the post office box:

MARAD A/P SAR Invoices Branch
AMZ-150
6500 S MacArthur Blvd.
Oklahoma City, OK 73169