

**ORDER FOR SUPPLIES OR SERVICES**

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

1. DATE OF ORDER 09/04/2012		2. CONTRACT NO. (If any) DTMA-92-D-2012-0006		6. SHIP TO: a. NAME OF CONSIGNEE U.S. DOT/Maritime Administration	
3. ORDER NO. MSC2012001		4. REQUISITION/REFERENCE NO. MA-PR615.5-20120066		b. STREET ADDRESS Atlantic Division Operations 7737 Hampton Blvd Building 19 Suite 300 Atten: Art Kreider	
5. ISSUING OFFICE (Address correspondence to) U.S.DOT/ Maritime Administration Atlantic Div. Acquisition Office MAR-380-2 7737 Hampton Blvd Building 19 Suite 300 NORFOLK VA 23505-1204				c. CITY Norfolk	
7. TO: Cynthia Tirrell-Norton				d. STATE VA	
a. NAME OF CONTRACTOR MARINE SYSTEMS CORPORATION				e. ZIP CODE 23505-1204	
b. COMPANY NAME				f. SHIP VIA	
c. STREET ADDRESS 70 FARGO ST				8. TYPE OF ORDER <input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
d. CITY BOSTON		e. STATE MA		REFERENCE YOUR:  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.	
f. ZIP CODE 02210-2122		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.			
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE U.S. DOT/ Maritime Administration	

11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input checked="" type="checkbox"/> a. SMALL <input type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input checked="" type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOMEN-OWNED SMALL BUSINESS PROGRAM <input type="checkbox"/> h. ECONOMICALLY DISADVANTAGED WOMEN-OWNED SMALL BUSINESS (EDWOSB)				12. F.O.B. POINT Destination	
13. PLACE OF a. INSPECTION Destination		b. ACCEPTANCE Destination		14. GOVERNMENT B/L NO.	
				15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	
				16. DISCOUNT TERMS	

**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)
	FS-209 Alteration Design to Support 77-Ton Telescoping Crawler Crane  See attached Statement of Work  IMPORTANT NOTE: Pricing obligated by this Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)	
	21. MAIL INVOICE TO:							
	a. NAME MARAD A/P INVOICES						\$50,000.00	17(i) GRAND TOTAL
	b. STREET ADDRESS (or P.O. Box) 6500 SOUTH MCARTHUR BLVD						\$50,000.00	
c. CITY OKLAHOMA CITY		d. STATE OK		e. ZIP CODE 73169				

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

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DATE OF ORDER 09/04/2012	CONTRACT NO. DTMA-92-D-2012-0006	ORDER NO. MSC2012001
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ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>order represents a labor-hour task order ceiling price. It is intended that a firm, fixed-price be negotiated subsequent to receipt of a pricing proposal for performance of the Statement of Work. Upon reaching agreement for a firm, fixed price, this task order will be modified accordingly.</p> <p>Admin Office:                      U. S. DOT Maritime Administration                      Atlantic Div. Acquisition Office                      MAR-380.2                      7737 Hampton Blvd                      Building 19 Suite 300                      Norfolk VA 23505-1204</p> <p>Accounting Info:                      70XR161710.2012.97180FAC00.1261000000.25102.61006600 / 7012617180FAC0                      Period of Performance: 09/04/2012 to 01/31/2013</p>					
0001	BASE - Program Manager	40	HR	86.67	3,466.80	
0002	BASE - Project Engineer	80	HR	68.82	5,505.60	
0003	BASE - Naval Architect	80	HR	62.90	5,032.00	
0004	BASE - Sr. Engineer	40	HR	52.45	2,098.00	
0005	BASE - Engineer	160	HR	45.72	7,315.20	
0006	BASE - Sr. Engineering Technician		HR	49.61	0.00	
0007	BASE - Engineering Technician		HR	40.13	0.00	
0008	BASE - Sr. Designer	80	HR	77.53	6,202.40	
0009	BASE - Designer Continued ...	80	HR	58.36	4,668.80	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$34,288.80

**ORDER FOR SUPPLIES OR SERVICES  
SCHEDULE - CONTINUATION**

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DATE OF ORDER 09/04/2012	CONTRACT NO. DTMA-92-D-2012-0006	ORDER NO. MSC2012001
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ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0010	BASE - Systems Analyst/Prog		HR	50.86	0.00	
0011	BASE - CAD Operator	40	HR	38.93	1,557.20	
0012	BASE - Planner/Estimator	20	HR	47.64	952.80	
0013	BASE - Word Processor	40	HR	30.55	1,222.00	
0014	BASE - Subcontract/Consultant Support				0.00	
0015	BASE - Reimbursable Expenses (excl Travel)				4,479.20	
0016	BASE - Travel Expenses				7,500.00	
<p>The total amount of award: \$50,000.00. The obligation for this award is shown in box 17(i).</p>						

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$15,711.20

1. General:

- 1.1. The work required consists of engineering and stability study, design modifications, and recommendations for the MULBERRY ISLAND (aka, ROS) FS-209 to meet the concept of design and future operations below. The Contractor will produce biddable specifications for the modifications and stability calculations for the redesigned vessel.
- 1.2. The FS-209 is a self-propelled, twin screw, steel hull vessel with length overall - 170'-6" (hull), beam overall - 42'-8", molded depth amidships - 7'-8" and a displacement of approximately 755 long tons light. It was acquired from the U. S. Army Corps of Engineer (USACE) through a government transfer in 2009. The vessel at that time had a 60 ton crane on a fixed pedestal mounted on the forward deck. The aft two-thirds of the vessel is occupied by a deck house for crew accommodations and to house the machinery plant.
- 1.3. The vessel is used at the fleet to service moorings and handle items to be loaded/unloaded onto the ships in the anchorage. The small amount of deck space and the 110' length of the crane boom make what little space was available on the forward deck unusable for carrying and lifting items, or servicing moorings. In order to provide adequate work area for crane operations, the boat had to work with a companion barge. This arrangement of boat and barge combination totaled over 270' and with the large sail area of the deck house made it unwieldy when working in tight quarters alongside ships.
- 1.4. In the fall of 2010, the crane suffered a major casualty when the boom collapsed due the failure of the lifting pendants. The boom was destroyed outright, and after fractures were found in the frame of the crane cab and support structure, it too was determined to be beyond economical repair. There has been no working crane on the boat since that time.

2. Inspection of Plant by Prospective Bidders:

For information regarding the exact location of the plant and arrangements for inspection, contact Mr. Chris Hudgins James River Reserve Fleet Site Office, Fort Eustis, VA, and (757) 887-3233 x 17.

3. Drawings:

The following drawings are part of these specifications and are referenced in work items. Items marked with an asterisk (\*) shall be produced as deliverables with the modifications shown as a minimum. Other design details may be needed for other proposed modifications and shall be provided separately as needed.

Dwg #	Title
• 4-1-60*	General Arrangement Main Deck and Hold
• 4-1-61*	General Arrangement Hurricane Deck and Above
• 4-1-62*	Outboard Profile
• 4-1-63*	Transverse Section
• 4-1-64*	Structural Plan
• 4-1-65*	Lines and Offsets
• 4-1-66	Details of Spuds and Spud Wells
• 4-1-68*	Arrangement of Machinery - Plan View and List of Machinery
• 4-1-69*	Arrangement of Machinery - Elevations and Sections
• 4-1-70	Propeller Shafting and Bearing Arrangement
• 4-1-71*	Heating, Ventilation, and Air Conditioning

- TB 720-140 Stacks
- TB 720-141 Exhaust piping for Main Eng, Generator, Incinerator, Heating Boiler

#### 4. Concept of Redesign and Future Operations

The successful redesign of the vessel will provide for the following considerations and include three (3) sets of drawings of each:

- 4.1. The vessel will be redesigned to remove (unnecessary) portions of the deck house and set the forward edge of pilot/deck house from its present location back approximately 60 feet such that the forward edge is even with the location of the present machine shop and laundry spaces that are now just forward of the engine room. The pilot house shall be lowered from its present location on the 02+ deck to the 01 deck forward of the stacks. For design purposes, it is desirable to reutilize as much of the existing structure in the redesign as possible to reduce material costs during modification. The overall effect of the change would be to reduce the sail area and increase the usable deck space forward.
- 4.2. The deck must be reinforced to support the weight of a Mantis Cranes Model 15010 77 Ton Telescopic Boom Crawler Crane. The design shall include recommendation for a bed for the crane to rest upon and tie down arrangements for the crane.
- 4.3. The weather deck areas forward of the deck house need to be modified to remove the gooseneck vents, raised hatches, and other obstructions (except deck fittings such as cleats) to allow for a smooth work area.
- 4.4. A cross-deck winch system will be designed based on the conceptual drawing provided to allow for anchor mooring to be retrieved. The overall goal of this system to keep people out of dangerous areas when working the moorings. This includes cross deck winch (25 ton pull) minimizing the need for overhead lifts with the crane and use of mechanical appliances (such as the Smith-Berger 200-ton Model Shark Jaws) to minimize the amount of exposure that the deck crew has to chain under a load.
- 4.5. Design shall include a bow thruster, power source, and pilot house control along with mechanical drawings to be used by a shipyard for installation.
- 4.6. The final design shall be evaluated for stability. The redesign shall take into account the changes in weight and center of gravity created by the reconfiguration. Specific calculations shall be included in a stability book to be used when the crane is on the vessel and being used to make lifts.
- 4.7. The A-E shall deliver a final set of plans and specifications suitable for use in soliciting proposals to make the recommended alterations to the FS-209.