

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 6
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. MA-PR615-20120028	5. PROJECT NO. (If applicable)
6. ISSUED BY U.S.DOT/ Maritime Administration Atlantic Div. Acquisition Office MAR-380-2 7737 Hampton Blvd Building 19 Suite 300 NORFOLK VA 23505-1204	CODE 00092	7. ADMINISTERED BY (If other than Item 6) U. S. DOT Maritime Administration Atlantic Div. Acquisition Office MAR-380.2 7737 Hampton Blvd Building 19 Suite 300 Norfolk VA 23505-1204	CODE 00092
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) MARINE DESIGN AND OPERATIONS, INC. Attn: RAJ SENGUPTA 701 SPRINGFIELD ROAD SUITE 2-C KENILWORTH NJ 07033-1024		(x) 9A. AMENDMENT OF SOLICITATION NO.	9B. DATED (SEE ITEM 11)
CODE 043851963	FACILITY CODE	x 10A. MODIFICATION OF CONTRACT/ORDER NO. GS-23F-0233S DTMA-92-F-2011-000008	10B. DATED (SEE ITEM 13) 09/23/2011

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 43.103(a) Bilateral contract modifications
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not. is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

RRF Fleet-Porting Analysis at James River Reserve Fleet, Ft. Eustis, VA

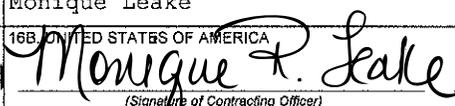
See attached revisions to Statement of Work language for highlighted descriptions of scope adjustments and clarifications.

SUMMARY OF CHANGES

- References to PWSs and ABS approved drawings are removed and replaced with PWSs and ABS compliant concept drawings and Item 0006 ABS Fees is no longer funded.
- Requirement for a bi-weekly status and expense report is now included.
- Requirement is established for bi-weekly teleconference to discuss status.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) 	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Monique Leake
15B. CONTRACTOR/OFFEROR MARINE DESIGN AND OPERATIONS, INC. <small>(Signature of person authorized to sign)</small>	15C. DATE SIGNED 10/20/2011
16B. UNITED STATES OF AMERICA 	16C. DATE SIGNED 10/20/2011

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
GS-23F-0233S/DTMA-92-F-2011-000008/0001

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NAME OF OFFEROR OR CONTRACTOR
MARINE DESIGN AND OPERATIONS, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>4. Mid-term review teleconference is established.</p> <p>5. Logistical support recommendations now to address mooring maintenance and crane services as well as recommended modification to existing fleet craft.</p> <p>6. A new Item 0007 is added to prepare concept sketches and estimate for alterations to FS-209 to accommodate crawler crane and additional concept recommendations for hydraulic puller handling of plate anchor system ground tackle for an existing JRRF fleet craft.</p> <p>7. The period of performance is extended to 02/29/2012.</p> <p>Adjustments in scope described in this modification will not result in an increase to the price of this order. Funding previously applied to ABS Fees has been realigned between Items 0001 and 0007.</p> <p>LIST OF CHANGES: Reason for Modification: Supplemental Agreement for work within scope Period Of Performance End Date changed from 11-NOV-11 to 29-FEB-12 Previous Total Amount for this Award: \$127,662.00 Total Amount for this Modification: \$0.00 New Total Amount for this Award: \$127,662.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1 Description language was revised to include bi-weekly reports/teleconferences and mid-term review.</p> <p>Total Amount changed from \$78,203.00 to \$85,398.00 Obligated Amount for this modification: \$7,195.00</p> <p>CHANGES FOR ACCOUNTING CODE: 70XR161710.2011.93140MIS00.1161000000.25101.61006600 / 7011613140MIS0 Amount changed from \$78,203.00 to \$84,271.00</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 70XR161710.2011.93140SPE00.1161000000.25101.61006600 / 7011613140SPE0 FY 2011 Amount: \$1,127.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 6 Continued ...</p>				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
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NAME OF OFFEROR OR CONTRACTOR
MARINE DESIGN AND OPERATIONS, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Description is revised to: ABS Fees ; This allowance is removed. Total Amount changed from \$15,000.00 to \$0.00 Obligated Amount for this modification: -\$15,000.00 CHANGES FOR ACCOUNTING CODE: 70XR161710.2011.93140MIS00.1161000000.25101.61006600 / 7011613140MIS0 Amount changed from \$6,068.00 to \$0.00 CHANGES FOR ACCOUNTING CODE: 70XR161710.2011.93140SPE00.1161000000.25101.61006600 / 7011613140SPE0 Amount changed from \$8,932.00 to \$0.00 ADDED NEW LINE ITEM NUMBER: 7 Obligated Amount for this item: \$7,805.00 Accounting Code for new item: 70XR161710.2011.93140SPE00.1161000000.25101.61006600 / 7011613140SPE0 Amount for new item: \$7,805.00 Delivery Location Code: 00092 U.S. DOT/Maritime Administration Atlantic Division Operations 7737 Hampton Blvd Building 19 Suite 300 Norfolk VA 23505-1204 USA Payment: MARAD A/P INVOICES P.O.BOX 25710 OKLAHOMA CITY OK 73125 FOB: Destination Period of Performance: 09/23/2011 to 02/29/2012				
0007	FS-209 Alterations and Plate Anchor System Maintenance Concepts See Statement of Work Accounting Info: 70XR161710.2011.93140SPE00.1161000000.25101.61006600 / 7011613140SPE0 Funded: \$7,805.00				7,805.00

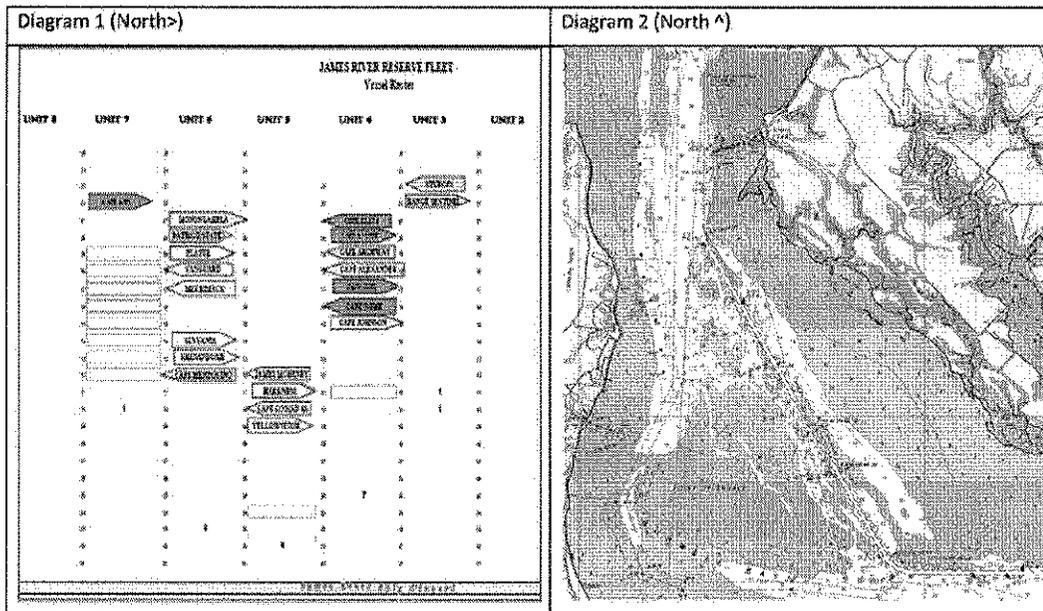
STATEMENT OF WORK

Background: The USDOT Maritime Administration Division of Atlantic Operations (DAO), Norfolk, Virginia is studying possible relocation of Ready Reserve Force (RRF) vessels to the James River Reserve Fleet (JRRF) at Fort Eustis, Virginia. DAO has identified the following vessels (that can physically transit to the fleet) as potential relocation candidates. These vessels are currently lay-berthed at various east coast ports (see below).

CAPE EDMONT	Charleston, SC	CAPE RAY	Portsmouth, VA
CAPE DUCATO	Charleston, SC	CAPE RISE	Portsmouth, VA
CAPE DOUGLAS	Charleston, SC	CAPE	Baltimore, MD
CAPE DECISION	Charleston, SC	CAPE WRATH	Baltimore, MD
CAPE DIAMOND	Charleston, SC	CORNHUSKER	Newport News, VA
CAPE DOMINGO	Charleston, SC	FLICKERTAIL	Newport News, VA
CAPE MAY	Norfolk, VA	GOPHER STATE	Newport News, VA
CAPE RACE	Portsmouth, VA	SS WRIGHT	Baltimore, MD

ITEM 0001- FLEET-PORTING ANALYSIS AND DELIVERABLES

SCOPE: The Government needs detailed evaluation, analysis, plans and costs for up to 16 listed vessels to moor in the JRRF anchorage. And development of PWSs and ABS **compliant concept** drawings for RRF Ship mooring connections to plate anchors, additional vessel ROS alarms, vessel access modifications and piping to MSD modifications. The JRRF currently has 22 vessels moored and can safely berth many more vessels through plate anchoring and other recommended methodologies.



The contractor shall provide all labor, travel, supervision, tools, materials, parts, and equipment necessary to perform analytical, technical, management and engineering support services aboard specified ships listed above in Item 1. The contractor is responsible for any required coordination with regulatory agencies (e.g., Coast Guard, ABS).

The Government will provide directions and access to facilities/key individuals for each vessel/layberth.

ANALYSIS AND DELIVERABLES

(a) The contractor shall evaluate and analyze each vessel's mooring connections/attachment points (i.e. bollard, cleat, winch drum) for interoperability with the JRRF plate anchor system and specify any required modifications for safe mooring, to include recommended mooring arrangements for vessels to moor during severe weather to include storm surges and high winds associated with Gale force winds (>39 mph wind speed) and above. After written approval of recommendation by COTR, develop performance work statement and ABS **compliant concept** drawings suitable for bidding, as required. **The contractor shall provide bi-weekly a status and expense report showing progress in terms of percentage of completion with a narrative discussion of the status of each deliverable. Also, the contractor shall participate in a bi-weekly telephone conference of approximately one hour scheduled as soon as practicable following submission of the bi-weekly status and expense report. At the mid-term point in performance, the contractor shall participate in a mid-term review by teleconference not to exceed two hours in length which shall take the place of one of the bi-weekly telephone conferences.**

(b) The contractor shall analyze current JRRF vessel "plot plan" (Diagram 1) and develop recommendations for new JRRF plot plans incorporating the minimal and optimal requirements for the positioning of (up to 16) additional ships, required fendering, and line configuration for tying up safely between ships under normal and severe weather conditions.

(c) The contractor shall review current vessel and JRRF access points for personnel and cargo identifying all access modifications required to ensure safe routine access, based on recommended vessel positions in item b. After written approval of contractor recommendation by COTR, develop performance work statement and ABS **compliant concept** drawings suitable for bidding, as required.

(d) The contractor shall evaluate the vessels and the JRRF's current fire and flood alarm systems for interoperability, functionality and safety, and make recommendations for additional equipment (to install on up to 16 additional vessels) that would be required for minimally manning and optimally provide support for fleet-porting. After written approval of contractor's recommendation by COTR, develop performance work statement and ABS **compliant concept** drawings suitable for bidding, as required.

(e) The contractor shall evaluate current vessels and JRRF systems for waste stream handling (i.e., MSD and gray water effluent discharges, hazmat, ship Hazardous waste) and make recommendations for waste management (e.g. ship-to-shore, piping modifications) keeping within current and pending local, state, and federal environmental regulations to date. After written approval of contractor's recommendation by COTR, develop performance work statement and ABS **compliant concept** drawings suitable for bidding, as required.

ITEM 0002 – LOGISTICS COMMUNICATION READINESS

(a) The contractor shall evaluate and make recommendations for efficient, timely logistical support to fleet-ported vessels by the JRRF staff, including **mooring maintenance, crane service**, transport of personnel, equipment, materials, parts, and resupply of fresh water/supplies. Use current JRRF fleet craft and equipment, as well as recommendations for purchase of additional transport assets **or modification to existing fleet craft** that would have a reasonable return on investment.

(b) The contractor shall evaluate the current ship-to-shore communications systems for interoperability, functionality for data and voice communications, and make recommendations for establishing and maintaining a reliable, cost effective communications system.

(c) The contractor shall evaluate the impact to vessel readiness (i.e., ability to activate within a standard of 5 days), as well as how to gain efficiencies in completing repairs. Analyze options such as using shoreside vendors while ship is at anchorage or relocating to a "down river" facility.

ITEM 0003 – FLEET-PORTING BRIEFING

(a) The contractor shall prepare and present an in-process review at the conclusion data collection and at the midpoint of the contract in Norfolk, VA. An electronic slide presentation in a format compatible with MS PowerPoint shall be delivered to the COTR.

**DTMA-92-F-2011-000008 RRF Fleet-Porting Analysis at the
James River Reserve Fleet, Fort Eustis, Virginia**

Mod 0001

(b) The contractor shall prepare and present a briefing on the results of their analysis in Norfolk, VA. An electronic slide presentation in a format compatible with MS PowerPoint shall be delivered to the COTR.

ITEM 0007 – FS-209 ALTERATIONS

(a) The contractor shall prepare concept sketches and a cost estimate to alter the FS-209 Fleet Vessel by removing the crane and plating over the deck to make it structurally suitable for supporting a crawler crane with the capacity and load to be specified by the Government. The government is interested in concepts and equipment identification to enable hydraulic puller handling of ground tackle for maintenance of the JRRF plate anchor system from an existing JRRF fleet craft or other floating platform.