

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODER	PAGE 1 OF 8 PAGES
2. AMENDMENT/MODIFICATION NO. Modification No. 0003	3. EFFECTIVE DATE See Block 16c	4. REQUISITION/PURCHASE REQ. NO(S). NAAN0000-4-00359	5. PROJ. NO. (if applicable)
6. ISSUED BY CODE		7. ADMINISTERED BY (if other than Item 6) CODE	

Department of Commerce
National Oceanic & Atmospheric Administration
1315 East West Highway
Silver Spring, MD 20910, Room 10353
Phone: 301-713-1354, ext. 197

8. NAME AND ADDRESS OF CONTRACTOR (No., street, State and ZIP Code) VT Halter Marine, Inc. 900 Bayou Casotta Parkway Pascagoula, MS 39581	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED (SEE ITEM 11)
	10A. MODIFICATION OF CONTRACT/ORDER NO. X DG133E-04-CN-00036
	10B. DATED (SEE ITEM 13) 12/24/2003
DUNS 16-010-8544	FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation as amended or 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 as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ___ copies of this amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT 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)
1404A2PM1HVPVT24060801006080000000000000: 100% Net Increase \$794,513.00

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

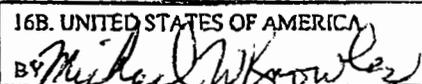
<input checked="" type="checkbox"/>	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input checked="" type="checkbox"/>	CHANGES - FIXED PRICE (AUG 1987)
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.)
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: MUTUAL AGREEMENT OF THE PARTIES
<input type="checkbox"/>	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 (Organization by UCF section headings, including solicitation/contract subject matter where feasible.)
The purposes of this modification are to: (1) exercise optional CLIN 0003 - SWATH Coastal Mapping Vessel (CMV) Contract Design and Documentation, and (2) add an additional optional CLIN 0022 for long-lead time items. These changes modify contract Sections B, C, H, and J and delete Sections L and M. Updated Section J Attachments J-1 and J-6 are also provided.

See Continuation Sheets 2-8.

Except as provided herein, all terms and conditions referenced in Item 9A and 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) RICHARD McCREARY, EXECUTIVE VP	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) MICHAEL W. KNOWLES CONTRACTING OFFICER
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED 9/23/04
16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)	16C. DATE SIGNED 9/23/04

Block 14:

Modification No. 0003 is hereby issued to VT Halter Marine, Inc. to (1) exercise CLIN 0003 (SWATH Coastal Mapping Vessel Contract Design and Documentation) and (2) in accordance with the clause of the subject contract entitled "CHANGES", incorporate an additional optional CLIN 0022 (Long Lead Time Items).

VT Halter Marine's proposal for Contract Design and Detail Design and Construction, received on May 7, 2004, is incorporated by reference. Contract Section B is modified to reflect the final CLIN prices contained in that proposal and add optional CLIN 0022. Contract Section C is modified to reflect the addition of optional CLIN 0022. Contract Section H is modified to delete clause H-16. Contract Sections L and M are deleted. The following Section J contract attachments are incorporated:

- J-1 Statement of Requirements for Design and Construction of a NOAA SWATH Coastal Mapping Vessel (CMV) – Revision D dated September 21, 2004
- J-6 NOAA SWATH Coastal Mapping vessel (CMV) Statement of Requirements for Implementation of the Survey launch Mission Suitability Feature – Revision B dated September 21, 2004

A summary of changes to Attachment J-1 follows:

1. Changed revision and date on cover and in headers
2. Added revision D note on Revision History page.
3. In 070a, page 000-9, changed to:

Design Speed:

[MODIFICATION 0003] *The Design speed is defined as the speed resulting from a power level no greater than 80 percent of maximum continuous rating (MCR) of the propulsion plant. The minimum design speed is 12.4 knots in calm water. [MODIFICATION 0003].*

Reason: Incorporate the contractor's 12.4 knot design speed as a design requirement (changed from 12 knots) and clarify the meaning of design speed as a speed at a percentage of installed MCR propulsion power.

4. In 070a, page 000-10, changed to:

Operating profiles for major missions are defined in Table 070-1. The ship will be operating 240 days per year. [MODIFICATION 002] An additional mission profile is that the ship shall have a transit range of [MODIFICATION 0003] 2,750 nautical miles [MODIFICATION 0003] at Transit Speed as a minimum [MODIFICATION 0002].

Reason: Incorporate the contractor's 2750 nm transit range as a design requirement (from 1500 nm).

5. In 070a, page 000-10, changed Table 070-1. Mission Operating to:

Table 70-1. Mission Operating Profiles

Parameters	High Speed High Resolution Side Scan Sonar	Multibeam Bathymetry (SWMB)	Combination Operations (SWMB & HSHR)
Length of mission [MODIFICATION 0002] (minimum) [MODIFICATION 0002]	<i>18 days</i> [MODIFICATION 0003]	<i>10 days</i> [MODIFICATION 0003]	<i>14 days</i> [MODIFICATION 0003]

Reason: Incorporate the contractor's "Length of Mission" as a design requirement (from 5 day missions).

6. In 070c, page 000-12 changed to:

Draft Limit. – [MODIFICATION 0001] The navigational draft shall not exceed [MODIFICATION 0003] *3.8 m* [MODIFICATION 0003] with the vessel at the design displacement and including all sonars and appendages [MODIFICATION 0001].

Reason: Incorporate the contractor's 3.8 m draft limit as a design requirement (from a maximum of 4.5 m).

7. In 070c, page 000-13 changed to:

Endurance Range - Range at transit speed: [MODIFICATION 0003] *3,500 nm*. [MODIFICATION 0003]

Reason: Incorporate the contractor's 3500 nm endurance range as a design requirement (from a maximum of 4.5 m).

8. In 070c, page 000-13 changed to:

Ship's Complement – [MODIFICATION 0003] *14 persons*. [MODIFICATION 0003] [MODIFICATION 0001] Two of these persons shall be considered to be officers for purposes of crew and effects weights. [MODIFICATION 0001]

Reason: Incorporate the contractor's complement increase due to the survey launch implementation in accordance with J-6 (increased from 12 persons).

9. In 070c, page 000-13 change to:

Hydrodynamic Model Tests. – Hydrodynamic model test data from physical model testing shall be provided for the contract hull form, during the contract design phase. As a minimum, test data shall include flow line tests for canard/stabilizer alignment, bare hull resistance, appended resistance, and stock propeller self propulsion [MODIFICATION 0003] *and planar motion mechanism (PMM)*. [MODIFICATION 0003]

Reason: Incorporate the contractor's planned additional PMM test to prove the vessel's maneuvering capabilities as a design data requirement.

10. In 070f, page 000-15 changed to:

Accommodations. - Staterooms with permanent berthing and toilet/showers (T/S) shall be provided for [MODIFICATION 0003] *14 persons, comprised of six double staterooms and two single staterooms (as required in Attachment J-6)* [MODIFICATION 0003]. Each double stateroom shall share a T/S with another double stateroom.

Complement related facilities, services, lifesaving equipment, stores, and functions shall be based on [MODIFICATION 0003] *14 persons* [MODIFICATION 0003].

Reason: Incorporate the contractor's complement increase due to the survey launch implementation in accordance with J-6 (increased from 12 persons).

11. In 070f, page 000-18, changed to add:

[MODIFICATION 0003]

f. The Survey Launch Mission Suitability Features shall be provided in accordance with Attachment J-6. [MODIFICATION 0003]

Reason: Incorporate the contractor's design providing the survey launch implementation in accordance with Attachment J-6.

12. In 200a, page 200-1, changed to:

200a. General

[MODIFICATION 0003] *The ship shall be twin screw, with fixed pitch propellers driven by a geared diesel propulsion system* [MODIFICATION 0003]. Belt, chain and hydraulic propulsion drives are prohibited.

Reason: Incorporate the contractor's specific propulsion system and eliminate references to other types of systems (integrated diesel, etc.). Also deleted references to the Single System Vendor for an Integrated Diesel Electric propulsion plant.

13. In 233a, page 200-4, changed to:

[MODIFICATION 0003] [MODIFICATION 0003]

Reason: Incorporate the contractor's specific propulsion system and eliminate references to other types of systems (integrated diesel electric) – this deletion eliminated a discussion of the diesel engines for generator sets.

14. In 235, page 200-5, changed to:

[MODIFICATION 0003] [MODIFICATION 0003]

Reason: Incorporate the contractor's specific propulsion system and eliminate references to other types of systems (integrated diesel electric) – this deletion eliminated Section 235 ELECTRIC PROPULSION SYSTEM.

15. In 245a, page 200-7, changed to:

245a. GENERAL

[MODIFICATION 0003] *The propulsors shall be open screw fixed pitch.* [MODIFICATION 0003]

Reason: Incorporate the contractor's specific propulsion system and eliminate references to other types of systems – this change deleted discussion of controllable pitch propellers. On the same page, "Section 245c CP PROPELLORS", was deleted.

16. In 300a, page 300-1, changed to:

300a. General

The electric plant shall be designed, constructed and configured in accordance with IEEE-45, "IEEE Recommended Practice for Electric Installations on Shipboard." All definitions used in this section are the definitions of that document. All recommendations in IEEE 45 are mandatory and shall be incorporated.

[MODIFICATION 0003] [MODIFICATION 00003]

The electrical generating system for geared diesel and non-integrated propulsion plants shall be configured to allow for segregation of the bow thruster (if provided) and a generator for all other loads.

Reason: Incorporate the contractor's specific propulsion system and eliminate references to other types of systems (integrated diesel, etc.). This modification deleted discussion of requirements for an Integrated Diesel Electric plant. At the bottom of the page an additional paragraph about the duties of an SSV with respect to Integrated Diesel Electric plant design, was deleted.

17. In 505b, page 500-3, changed to:

505b. Materials

Piping system material shall be in accordance with ASTM F1155, as modified by Table 505-1 and as specified herein.

Cu-Ni piping shall be used for all seawater systems.

Hydraulic piping, tubing and fittings exposed to the weather shall be CRES.

[MODIFICATION 0003] [MODIFICATION 00003]

Reason: Incorporates the contractor's design by deleting reference to aluminum piping in aluminum hulls.

18. In 551a, page 500-13, changed to:

551a. Ship Service and Starting Air

Compressed air and receivers shall be provided for starting air [MODIFICATION 0003] (*if engines are air start*) [MODIFICATION 0003], ship service, ship's whistle, and control air. Two motor driven air compressors shall be provided. Compressors shall be sized so that each is able to provide 12 L/sec of ship service air at 860 kPa, in addition to any starting air requirements. Automatic means of isolating the starting air receivers, if provided, when ship service air is being used, shall be provided. Air compressors shall be of the rotary screw type, equipped for automatic loadless starting. In addition, compressors shall be provided with automatic pressure operated control switches, check

valves, pressure relief valves and stop valves. Each compressor shall have the capability of filling the starting air receivers, if provided. The ship service air system shall have an air receiver, moisture separator, piping valves, and other components, as required, to provide air at the required pressures, purity, dryness and flows to connected services. A drain connection fitted with automatic trap complete with manual valved bypasses, shall be provided for air receivers at the lowest points.

Reason: Incorporate the contractor's input on flexibility in power plant selection.

19. In 602f, page 600-3, changed to:

602f. Anchor Chain Markings

The anchor chains, [MODIFICATION 0003] *if provided*, [MODIFICATION 0003] shall be painted and marked to identify the length of chain paid out as follows:

Reason: Incorporate the contractor's input on design flexibility.

20. In 631b, page 600-15, changed to:

631b. Underwater Body Ablative Coating System

[MODIFICATION 0003] *The* ablative anti-foulant coating system shall be a copper-based tributyltin-free system.

The [MODIFICATION 0003] coating system is to be selected and installed in strict accordance with manufacturer's recommendations, for a 30 month service period.

Reason: Incorporates the contractor's design in deleting reference to painting aluminum hulls.

21. In 631b, page 600-15, changed to:

633 CATHODIC PROTECTION

[MODIFICATION 0003] *A* zinc anode cathodic protection system shall be installed to protect the underwater hull, appendages, sea chests, and other external seawater exposed components. Selection and location of anodes shall be in accordance with the *manufacturer's* recommendations for a minimum service life of 30 months between drydockings. [MODIFICATION 0003]

Reason: Incorporates the contractor's design in deleting reference to cathodic protection for aluminum hulls.

A summary of changes to Attachment J-6 follows:

1. Added revision and changed date on cover and in headers
2. In Attachment J-6, Section 1, page 2, changed to:

1. General - [MODIFICATION 0003] *Survey Launch Mission Suitability Feature* [MODIFICATION 0003]

[MODIFICATION 0003] *The Survey Launch Mission Suitability Feature for the NOAA SWATH Coastal Mapping Vessel (CMV) shall be provided as described in this document.* [MODIFICATION 0003]

Reason: Incorporate the contractor's selection to provide the Survey Launch Mission Suitability Feature as a design requirement rather than an objective.

3. In Attachment J-6, for Section 4, page 2, changed to:

4. Science Van Capability – The CMV shall have the capability to carry one 20-foot ISO container, in lieu of the survey launch. [MODIFICATION 0003] The van *shall* be oriented fore and aft. [MODIFICATION 0003] Underdeck strengthening shall be provided to withstand loading imposed by stowage of an ISO ICC 20 foot van, with a maximum weight not to exceed that of the survey boat. Flush ISO container corner fittings shall be permanently installed, in the deck at the van stowage location.

Reason: Changed “must” to “shall”, to clarify requirements.

4. In Attachment J-6, for Section 7, page 3, changed to:

7. Services – Services to the survey launch and van [MODIFICATION 0003] *shall* be provided with quick disconnect fittings located near the survey launch / van site. Portable service cables and hoses *shall* be provided and *shall* be routed to the van without obstruction to access routes, other equipment or operations. ISO fittings *shall* be provided to secure the van to the deck. [MODIFICATION 0003]

Reason: Changed “must” to “shall”, to clarify requirements.

5. In Attachment J-6, for Section 7, page 3, changed to:

e. Dial Telephone System – [MODIFICATION 0003] A weatherproof telephone connection box *shall* be provided in the vicinity of the survey launch / van site. [MODIFICATION 0003]

Reason: Changed “must” to “shall”, to clarify requirements.

6. In Attachment J-6, for Section 7, page 4, changed to:

i. [MODIFICATION 0003] The survey launch / van site must be clear of obstructions and sounding tubes, and *shall* not block access routes. [MODIFICATION 0003] A loading platform shall be provided to access the survey launch in the stowed position.

Reason: Changed “must” to “shall”, to clarify requirements.

7. In Attachment J-6, for Section 7, page 3, changed to:

j. Fresh Water – [MODIFICATION 0003] Hot and cold potable water hose bibbs *shall* be provided at the survey launch / van site. [MODIFICATION 0003]

Reason: Changed “must” to “shall”, to clarify requirements.

As a result of Modification 0003:

- (a) the total value of CLIN 0001 remains unchanged:

From: \$150,000.00 By: \$0.00 To: \$150,000.00

(b) the total value of CLIN 0003 increases by \$794,513.00:

From: \$0.00 By: \$794,513.00 To: \$794,513.00

(c) the Total Contract Value increases by \$794,513.00:

From: \$150,000.00 By: \$794,513.00 To: \$944,513.00

All other terms and conditions of the contract remain unchanged.