

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE

1 of 3

2. AMENDMENT/MODIFICATION NO.

1

3. EFFECTIVE DATE

2/16/2007

4. REQUISITION/PURCHASE NO.

4200187664

5. PROJECT NO. (If applicable)

6. ISSUED BY

NASA Glenn Research Center
Attn: Heidi D. Shaw
Exploration Systems Branch
21000 Brookpark Road, Mail Stop 500-319
Cleveland, OH 44135-3191

CODE CHA/HDS

7. ADMINISTERED BY (If other than Item 6)

CODE

8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and Zip Code)

Hamilton Sundstrand Space Systems International, Inc.
4747 Harrison Avenue
P. O. Box 7002
Rockford, IL 61125-7002

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO.

NNC07CA03C

10B. DATED (SEE ITEM 13)

2/16/2007

CODE (BX)(12)

FACILITY CODE

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 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)

PR 4200187664 OBLIGATES \$2,000,000.00

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

*** Select the SINGLE MOST IMPORTANT action for this mod. Specify Authority (as applicable) by selection. ***

- 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).
- C THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF Mutual Agreement
- D OTHER (Specify type of modification and authority)

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

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

See pages 2-3 attached.

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)

Alan A. Furman

Director, Contracts and Business Management

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)

Heidi D. Shaw, Contracting Officer

15B. CONTRACTOR/OFFEROR

15C. DATE SIGNED

February 16, 2007

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

BY

(Signature of person authorized to sign)

BY

(Signature of Contracting Officer)

Contract NNC07CA03C is hereby modified as follows:

1. Clause B.4 "Estimated Cost and Fixed Fee (NASA 18-52.216.74) (DEC 1991) paragraph (d) is revised to read as follows: "The total estimated cost and fixed fee for the total contract effort (including CLINS 2 and 3) is \$5,159,388.00."

2. Clause B.4 entitled "Contract Funding (NFS 18-52-232-81) (JUN 1990)" was inadvertently labeled B.4, and is corrected to read Clause "B.5".

3. Clause B.5 "Contract Funding (NFS 18-52.232-81) (JUN 1990)

Paragraph (a) is revised to include the following figure: \$ (b)(4), and the date of "April 2008".

Paragraph (b) is revised to include the following figure: "\$ (b)(4)"

4. Clause Listing F.1 "I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1), CLAUSE 52.217-7 MAR 1989 OPTION FOR INCREASED QUANTITY-SEPARATELY PRICED LINE ITEM

fill in is revised to read "Three (3) Months"

5. Clause H.5 "Additional Task Order Procedures" is revised to add the following under the table shown:

"Task Order Rates are shown in attachment (D) in section J.1 "List of Attachments -Negotiated (GRC 52.215-102 (AUG 2002))"

6. Section I.1 "Listing of Clauses Incorporated by Reference", FAR Clause 52.227-14 (JUN 1987) As modified by 1852.227-14 NASA FAR Supplement (OCT 1995) is revised to include "Alternate V (JUN 1987)" - that allows the Government to inspect limited rights data at the Contractor's facility.

7. Attachment (A) in J.1 "List of Attachments - Negotiated", the Statement of Work is revised to include the inclusion of the option item added by way of Amendment 4 to the RFP. Two sections are revised, and are noted as follows:

1st section: the fifth sentence of "Scope" of The Statement of Work is revised to read as follows:

"In the second task, the Contractor shall design and fabricate engineering model hardware for development purposes, test any subcomponent or breadboards deemed necessary by the Contractor, procure engineering model long lead hardware and fabricate, test and deliver four (4) turbine pump assemblies (with an option for 4 additional assemblies) that are flight-like engineering models that have completed an agreed upon test series which proves their capabilities."

2nd section: the first sentence of Section 4 of The Statement of Work is revised to read:

"Section 4 "TURBINE PUMP ASSEMBLY ENGINEERING MODEL DESIGN & FABRICATION"

The Contractor shall design, develop, fabricate, and deliver 4 turbine pump assembly engineering models (with the option for 4 additional models) that meet the requirements as described in the Turbine pump Assembly Performance Specification."

NOTE: The Statement of Work attached to the contract includes these revisions, the revisions are noted here for a matter of record.

8. Section J.1 "List of Attachments - Negotiated (GRC 52.215-102) (AUG 2002) is revised to read as follows:

"The following documents are attached hereto and made a part of this contract:

ATTACHMENT	TITLE	# OF PAGES
(A)	Statement of Work	18
(B)	Turbine Pump Assembly Performance Specification	30
(C)	Data Procurement Document	67
(D)	Task Order Rates (per Clause H.5)	1

The following documents are included herein by reference and made a part hereof:

NOTE: Originals and any updates to the plans listed below will be maintained by the Contracting Officer's Technical Representative.

DOCUMENT	TITLE	# OF PAGES
(E)	Small Business Subcontracting Plan dated 12/6/2006	73
(F)	Safety, Health and Environmental (SHE) Plan dated 12/14/06 Document Number: TVC4-SA-SHP	14
(G)	System Safety Plan dated 12/6/06 Document Number: TVC3-SA-SSP	14
(H)	Quality Plan dated 12/6/06, Document Number TVC4-QE-QP	7
(I)	Manufacturing and Assembly Plan	12

9. A funding summary is as follows:

	<u>Previous Amount</u>	<u>This Action Mod #1</u>	<u>Resultant Amount</u>
Est. Cost	0.00	\$ (b)(4)	\$ (b)(4)
Fixed Fee	0.00	(b)(4)	(b)(4)
Total		\$2,000,000	\$2,000,000

10. All other terms and conditions under Contract NNC07CA03C remain in full force and effect.

Hamilton Sundstrand Coporation
Task Order Rates

<u>Task Order Pricing Rates (at Total Cost & Fee)</u>	<u>Contract Year 1 (ends 12/31/07)</u>	<u>Contract Year 2 (ends 12/31/08)</u>
Rates for One (1) Hour of Labor		
C30 Data Administration	(b)(4)	
C42 Engineering Technician		
C78 Millwright & Carpenter		
C83 Test Electrician		
M20 SLS Program Management		
M25 SLS Contract Administrator		
M26 SLS EVMS		
M27 SLS Scheduler	(b)(4)	(b)(4)
M28 SLS Risk		
M30 SLS Ops Lead		
M40 SLS Quality Assurance Engineer		
M50 SLS Test		
M50C Test Equip Factory Labor w/abated O/H		
M51 SLS Assembly		
M66 SLS Elec Test Equip Engineer		
M67 SLS Mech Test Equip Engineer	(b)(4)	
M69 SLS PWB/Design Drafting		
M81 SLS Analytical Services		
M82 SLS Mech/Advisory Engineer		
M83 SLS Mechanical Technician	(b)(4)	(b)(4)
M84 SLS Systems Engineer		
M85 SLS Reliability Engineer		

Rates for \$1 of Material

M01 Material	\$1.44	\$1.41
M05 Travel	\$1.31	\$1.29
M06 Outsource Services	\$1.31	

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE PAGE
1 of 2

2. AMENDMENT/MODIFICATION NO. 2
3. EFFECTIVE DATE 4/5/07
4. REQUISITION/PURCHASE NO.
5. PROJECT NO. (If applicable)

6. ISSUED BY CODE CHA/HDS
7. ADMINISTERED BY (If other than Item 6) CODE

NASA Glenn Research Center
Attn: Heidi D. Shaw
Exploration Systems Branch
21000 Brookpark Road, Mail Stop 500-319
Cleveland, OH 44135-3191

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and Zip Code)
Hamilton Sundstrand Space Systems International, Inc.
4747 Harrison Avenue
P.O. Box 7002
Rockford, IL 61125-7002

9A. AMENDMENT OF SOLICITATION NO.
 9B. DATED (SEE ITEM 11)
 10A. MODIFICATION OF CONTRACT/ORDER NO.
NNC07CA03C
 10B. DATED (SEE ITEM 13)
2/16/2007

CODE FACILITY CODE

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- D OTHER (Specify type of modification and authority)
Mutual Agreement

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

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SEE PAGE 2.

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)
BRIAN N. KIS
MANAGER CONTRACTS AND BUSINESS MANAGEMENT

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Heidi D. Shaw, Contracting Officer

15B. CONTRACTOR/OFFEROR
BY Brian N. Kis
(Signature of person authorized to sign)

15C. DATE SIGNED
APRIL 2, 2007

16B. UNITED STATES OF AMERICA
BY Heidi D. Shaw
(Signature of Contracting Officer)

16C. DATE SIGNED
4/5/07

1. Due to a delay in the initial distribution of the contract, the effective date is formally recognized as March 2, 2007. Consequently, the completion date (after 24 month period of performance) is revised to March 1, 2009.

2. Section I.1 "Listing of Clauses Incorporated by Reference" Part II "NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES, the following clause is hereby added:

1852.245-70 JULY 1997 CONTRACTOR REQUESTS FOR GOVERNMENT-OWNED EQUIPMENT

3. Attachment C, Data Procurement Document (DPD), Data Requirements Description (DRD) document number TVC4-MA-PS entitled "Program/Project Schedules", item 16.2 is revised as follows, to delete the reference to "NPD 9501.3 Earned Value Management" as an Applicable Document:

"16.2 Applicable Documents: N/A"

4. A funding summary is as follows:

	<u>Previous Amount</u>	<u>This Action Mod #2</u>	<u>Resultant Amount</u>
Est. Cost	\$ (b)(4)	-0-	\$ (b)(4)
Fixed Fee	(b)(4)	-0-	(b)(4)
Total	\$2,000,000	-0-	\$2,000,000

5. All other terms and conditions under Contract NNC07CA03C remain in full force and effect.

AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT

CONTRACT ID CODE

PAGE

1 of 1

2. AMENDMENT/MODIFICATION NO. 3	3. EFFECTIVE DATE 5/2/07	4. REQUISITION/PURCHASE NO.	5. PROJECT NO. (If applicable)
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6. ISSUED BY NASA Glenn Research Center Attn: Heidi D. Shaw Exploration Systems Branch 21000 Brookpark Road, Mail Stop 500-319 Cleveland, OH 44135-3191	CODE CHA/HDS	7. ADMINISTERED BY (If other than Item 6)	CODE
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8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and Zip Code) Hamilton Sundstrand Space Systems International, Inc. 4747 Harrison Avenue P. O. Box 7002 Rockford, IL 61125-7002	<input type="checkbox"/>	9A. AMENDMENT OF SOLICITATION NO.
	<input type="checkbox"/>	9B. DATED (SEE ITEM 11)
	<input checked="" type="checkbox"/>	10A. MODIFICATION OF CONTRACT/ORDER NO. NNC07CA03C
	<input type="checkbox"/>	10B. DATED (SEE ITEM 13) 2/16/2007

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<input type="checkbox"/>	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).
<input type="checkbox"/>	C	THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:	
<input checked="" type="checkbox"/>	D	OTHER (Specify type of modification and authority) FAR Clause 52.217-7 Option for Increased Quantity - Separately Priced Line Item	

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

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
SEE PAGE 2.

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) Heidi D. Shaw, Contracting Officer	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
BY _____ (Signature of person authorized to sign)		BY <u>Heidi D. Shaw</u> (Signature of Contracting Officer)	5/2/07

1. Pursuant to Clause 52.217-7 "Option for Increased Quantity-Separately Priced Line Item (MAR 1989)", the Government hereby exercises the option, (Contract Line Item 3) for the increased quantity.

2. Per contract line item 3, the quantity of "1 LOT" consists of "4 each Turbine Pump Assembly Engineering Models".

3. Delivery of line item 3 shall be in accordance with Clause F.3 "Deliverables". Delivery date is: August of 2008.

4. Funding summary is as follows:

	<u>Previous Amount</u>	<u>This Action Mod #3</u>	<u>Resultant Amount</u>
Est. Cost	\$ (b)(4)	0.00	\$ (b)(4)
Fixed Fee	(b)(4)	0.00	(b)(4)
Total	\$2,000,000	0.00	\$2,000,000

5. All other terms and conditions under Contract NNC07CA03C remain in full force and effect.