

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE 12	PAGE OF PAGES 1 5	
2. AMENDMENT/MODIFICATION NO. 102		3. EFFECTIVE DATE FEB 12 2007		4. REQUISITION/PURCHASE REQ. NO. N/A	
5. PROJECT NO. (If applicable)		6. ISSUED BY Procurement Office George C. Marshall Space Flight Center National Aeronautics and Space Administration Marshall Space Flight Center, AL 35812		7. ADMINISTERED BY (If other than Item 6) Jeffrey S. Jackson (256) 544-8935 Phone (256) 544-3223 Fax	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code) Science Applications International Corporation (SAIC) Company 6, Technology Services Company 10260 Campus Point Drive San Diego, CA 92121 c/o 6725 Odyssey Drive, Huntsville, AL 35806		9A. AMENDMENT OF SOLICITATION NO. <input checked="" type="checkbox"/>		9B. DATED (SEE ITEM 11)	
CODE CAGE- 0T5L1 FACILITY CODE SAP- 103429		10A. MODIFICATION OF CONTRACT/ORDER NO. NNM04AA02C		10B. DATED (SEE ITEM 13) 1/1/04	
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)
N/A

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF 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.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, 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), the "Changes" clause, the "Limitation of Funds" clause, and Mutual Agreement
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return 3 copies to the issuing office.

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

	Shared					Total Sum
	Negotiated	Savings	Award Fee	Potential	Contract	
	Estimated Cost	Fee	Earned	Award Fee	Value	Allotted
Prev. Base Total	\$683,850,326	\$0	\$22,922,532	\$16,604,206	\$723,377,064	\$621,000,032
This Modification	\$1,378,648	\$0	\$0	\$82,719	\$1,461,367	\$0
Rev. Base Total	\$685,228,974	\$0	\$22,922,532	\$16,686,925	\$724,838,431	\$621,000,032

SEE PAGE 2 FOR DESCRIPTION OF AMENDMENT/MODIFICATION

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) Jill C. Watkins, Senior Contracts Manager		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) David A. Iosco, Contracting Officer	
15B. CONTRACTOR/OFFEROR		16B. UNITED STATES OF AMERICA	
15C. DATE SIGNED FEB 07 2007		16C. DATE SIGNED FEB 12 2007	
Original Signed By: (Signature of person authorized to sign)		Original Signed By: (Signature of Contracting Officer)	

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT
(continued)

The purpose of this modification is to definitize the following SAIC proposal:

SAIC-P-030, Revision 1, entitled "Michoud Assembly Facility (MAF) Local Area Network (LAN)", and dated January 30, 2007

This proposal was submitted in response to NASA/MSFC letter Request for Proposal PS31-J/AA02C-06-237 and is based on the start date of February 15, 2007. Accordingly, NNM04AA02C is modified as follows:

- A. Under Section B, Clause B.2, Estimated Cost and Award Fee, the total potential Estimated Cost (including unexercised options) is increased by \$3,179,563. This increase is by \$1,378,648 (from \$181,677,794 to \$183,056,442) for Option Year 1 reflected as CLIN 003 in paragraph (b), and by \$1,800,915 (from \$178,377,825 to \$180,178,740) for Option Year 2 reflected in paragraph (b) as CLIN 005. The total of Potential Award Fee (including unexercised options) is increased by \$190,774. This increase is by \$82,719 (from \$10,905,388 to \$10,988,107) for Option Year 1 reflected as CLIN 003 in paragraph (b) and by \$108,055 (from \$10,707,388 to \$10,815,443) for Option Year 2 reflected as CLIN 005 in paragraph (b). These amounts are further allocated by contract year and CLIN as follows:

Paragraph (a) (Option Year 1)

<u>Period</u>	<u>Estimated Cost</u>	<u>Potential Award Fee</u>
2/15/07 – 6/30/07	\$584,487	\$35,069
7/01/07 – 12/31/07	\$794,161	\$47,650
TOTAL	\$1,378,648	\$82,719 = \$1,461,367

Paragraph (a) (Option Year 2)

1/01/08 – 6/30/08	\$900,458	\$54,028
7/1/08 – 12/31/08	\$900,457	\$54,027
TOTAL	\$1,800,915	\$108,055 = \$1,908,970

Paragraph (b)

<u>CLIN</u>	<u>Estimated Cost</u>	<u>Potential Award Fee</u>
003	\$1,378,648	\$ 82,719
005	\$1,800,915	\$108,055

- B. Under Section B, Clause B.3, Award Fee for Service Contracts, paragraph (i) is revised to reflect the adjusted Potential Award Fee pools for the periods affected by this definitization modification.
- C. Under Section B, Clause B.6, Contract Funding, an amount of \$26,302 is reallocated from Estimated Cost to Provisional Award Fee in order to provisionally fund 75% of the Potential Award Fee for the periods 7/1/06 to 12/31/06 and 1/1/07 to 6/30/07. Contractor billing of provisional award fee for any period shall not exceed 75% of the Potential Award Fee pool available for that period. Balance of fee shall be paid upon allocation of Earned Award Fee as determined by the UNITeS Fee Determination Official. This action will not result in a revised coverage date.
- D. Attachment J-1, Performance Work Statement, is revised to reflect incorporation of the efforts for which this contract action is executed. The effort delineated herein shall commence on February 15, 2007. The specific PWS sections revised by this modification are as follows:

<u>PWS Section</u>	<u>Title</u>	<u>Pages</u>
5.4	Telecommunications Services	J-1-73-74
5.11	Michoud Assembly Facility (MAF) IT Services	J-1-86-88
App. A	Systems Responsibilities	J-1-89

- E. Attachment J-7, Small Business Subcontracting Plan, is amended to include the subcontracting plan supplement required by definitization of the following proposal:

SAIC-P-030, Revision 1, entitled "Michoud Assembly Facility (MAF) Local Area Network (LAN)", and dated January 30, 2007

It is noted that the definitization amount associated with proposal SAIC-P-030, Revision 1, exceeds the \$550,000 threshold requiring submission of a Small Business Subcontracting Plan. This plan is not numbered but is incorporated as part of Attachment J-7. Future subcontracting plan supplements will also be incorporated as part of this attachment. It is noted that the cumulative contract value associated with this plan supplement, and future plan supplements, will include contract value increases that fell below the threshold requiring submission of a small business subcontracting plan supplement, if applicable. Therefore, the cumulative value page of each supplement will also reflect definitization of this proposal.

- F. On the Standard Form 26, Award/Contract, Block 15G, the total contract value is increased by \$1,461,367 (from \$723,377,064 to \$724,838,431) in recognition of the actions taken in (A) through (E) above.
- G. The modification(s) made above are reflected in total on the change page(s) enclosed herewith. In order to reflect the change(s) made, the page(s) listed below are hereby deleted from, or added to, NNM04AA02C. Either bolded text or a vertical change bar included in the right margin indicates the specific area(s) of change.

<u>Page(s) Deleted</u>	<u>Page(s) Added</u>
B-2 (Mod. 99)	B-2 (Mod. 102)
B-3 (Mod. 99)	B-3 (Mod. 102)
B-5 (Mod. 99)	B-5 (Mod. 102)
B-8 (Mod. 101)	B-8 (Mod. 102)
J-1-iv (Mod. 77)	J-1-iv (Mod. 102)
J-1-73 – J-1-74 (Mod. 69 - both)	J-1-73 – J-1-74 (Mod. 102 - both)
J-1-86 – J-1-93 (Mod. 69 - all)	J-1-86 – J-1-96 (Mod. 102 - all)
N/A	J-7 Supplement 17 (Mod. 102)

H. In recognition of the modification(s) agreed to herein as complete equitable adjustments for the Contractor's "proposal(s) for adjustment" listed below, the Contractor hereby releases the Government from any and all liability under this contract for further equitable adjustment(s) attributable to such facts or circumstances giving rise the "proposal(s) for adjustment."

<u>Contract Change Identification</u>	<u>Contractor Proposal Number</u>
NASA/MSFC letter Request for Proposal PS31-J/AA02C-06-237 dated December 20, 2006	SAIC proposal SAIC-P-030 dated January 12, 2007 and submitted via SAIC letter SAIC-07-017 dated January 11, 2007
Modification 102	SAIC proposal SAIC-P-030, Revision 1, dated January 30, 2007 and submitted via SAIC letter SAIC-07-032 dated January 30, 2007

I. All other terms and conditions of NNM04AA02C remain unchanged.

B.2 ESTIMATED COST AND AWARD FEE

(a) The estimated cost and contract fees are as follows:

Contract Year	Period Covered	Estimated Cost	Shared Savings Fee	Earned Award Fee	Potential Award Fee
Base Year 1	1/1/04-6/30/04	\$ 47,472,018		\$2,696,331	\$0
Base Year 1	7/1/04 - 12/31/04	\$ 86,792,101		\$4,851,221	\$0
Base Year 2	1/1/05-6/30/05	\$ 87,948,919		\$4,910,402	\$0
Base Year 2	7/1/05 - 12/31/05	\$ 90,970,318		\$5,162,909	
Base Year 3	1/1/06-6/30/06	\$ 94,048,190		\$5,301,669	
Base Year 3	7/1/06 - 12/31/06	\$ 94,940,986			\$ 5,698,818 AF (\$4,331,102 SF) (\$1,367,716 OF)
TOTAL Base		\$502,172,532		\$22,922,532	\$5,698,818
Option Year 1	1/1/07-6/30/07	\$92,933,954			\$ 5,578,396 AF (\$4,239,581 SF) (\$1,338,815 OF)
Option Year 1	7/1/07 - 12/31/07	\$90,122,488			\$ 5,409,711 AF (\$4,111,380 SF) (\$1,298,331 OF)
TOTAL Opt. 1		\$183,056,442			\$10,988,107
Option Year 2	1/1/08-6/30/08				
Option Year 2	7/1/08 - 12/31/08				
TOTAL Opt. 2					
	TOTAL	\$685,228,974		\$22,922,532	\$16,686,925

* AF denotes Award Fee
 ** SF denotes Subjective Fee
 ***OF denotes Objective Fee

(b) The estimated cost and award fees applicable to the base period and each option period are as follows:

<u>CLIN</u>	<u>Qty.</u>	<u>Unit</u>	<u>Estimated Cost</u>	<u>Award Fee</u>
BASIC PERIOD (January 1, 2004 thru December 31, 2006)				
001****	1	Job	\$502,172,532	\$28,621,350
			<u>Estimated Amount</u>	<u>Maximum Amount</u>
002	1	ID/R	\$0	\$1,500,000

****The total of Estimated Cost, Earned Award Fee, and Potential Award Fee associated with CLIN 001 shall not be exceeded unless revised by bilateral contract modification.

CLIN	Qty.	Unit	Estimated Cost	Award Fee
OPTION PERIOD 1 (Jan. 1, 2007 thru Dec. 31, 2007) (Exercised)				
003*	1	Job	\$183,056,442	\$10,988,107 AF (\$8,350,961 SF) (\$2,637,146 OF)

			Estimated Amount	Maximum Amount
004*/**	1	ID/R	\$0	\$500,000 (Exercised)

* No costs against CLINS 003 and 004 shall be expended prior to 1/1/07.
 **The actual value of CLIN 004 will be the summation of individual task orders issued pursuant to this clause and clauses B.7 and B.8. A reconciliation modification will be issued as required to reflect the current task order summation value in Clause B.2.

CLIN	Qty.	Unit	Estimated Cost	Award Fee
OPTION PERIOD 2 (Jan. 1, 2008 thru Dec. 31, 2008) (Unexercised)				
005	1	Job	\$180,178,740	\$10,815,443 AF (\$8,219,737 SF) (\$2,595,706 OF)

			Estimated Amount	Maximum Amount
006	1	ID/R	\$0	\$500,000 (Unexercised)

(End of clause)

B.3 AWARD FEE FOR SERVICE CONTRACTS

(a) The contractor can earn award fee from a minimum of zero dollars to the maximum stated in **Clause B.2, "ESTIMATED COST AND AWARD FEE"** in this contract.

(b) Beginning 6 months after the effective date of this contract, the Government shall evaluate the Contractor's performance every 6 months to determine the amount of award fee earned by the contractor during the period. The Contractor may submit a self-evaluation of performance for each evaluation period under consideration. These self-evaluations will be considered by the Government in its evaluation. The Government's Fee Determination Official (FDO) will determine the award fee amounts based on the Contractor's performance in accordance with **ATTACHMENT J-5, UNITEs CPAF EVALUATION PLAN**. The plan may be revised unilaterally by the Government prior to the beginning of any rating period to redirect emphasis. Performance evaluation for PWS sections 3.0 and 5.0 will be evaluated against the standards delineated in **ATTACHMENT J-4, PERFORMANCE MEASUREMENT STANDARDS**. Any changes to this ATTACHMENT will be made by bilateral contract modification.

(c) The Government will advise the Contractor in writing of the evaluation results. The NASA/MSFC Financial Management Office, RS23 will make payment based on issuance of a unilateral modification by the Contracting Officer.

(d) The amount of award fee which can be awarded in each evaluation period is limited to the amounts set forth

(i) The amount of award fee which has been awarded pursuant to this clause, the potential award fee available for the period, and the period to which said fee applies is set forth below:

Contract Year	Period Covered	Earned Award Fee	Potential Award Fee
Base Year 1	1/1/04- 3/30/04	\$270,275	\$275,791 (1/1/04 to 3/30/04)
	3/31/04- 6/30/04	\$2,426,056	\$ 2,572,649 AF * (3/30/04 to 6/30/04) (\$1,955,213 SF)** (\$617,436 OF)***
Base Year 1	7/1/04 - 12/31/04	\$4,851,221	\$ 5,207,408 AF (\$3,957,630 SF) (\$1,249,778 OF)
Base Year 2	1/1/05-6/30/05	\$4,910,402	\$ 5,270,936 AF (\$4,005,911 SF) (\$1,265,025 OF)
Base Year 2	7/1/05 - 12/31/05	\$5,162,909	\$ 5,453,009 AF* (\$4,144,287 SF**) (\$1,308,722 OF***)
Base Year 3	1/1/06-6/30/06	\$5,301,669	\$ 5,645,252 AF (\$4,290,392 SF) (\$1,354,860 OF)
Base Year 3	7/1/06 - 12/31/06		\$ 5,698,818 AF (\$4,331,102 SF) (\$1,367,716 OF)
Option Year 1	1/1/07-6/30/07		\$ 5,578,396 AF (\$4,239,581 SF) (\$1,338,815 OF)
Option Year 1	7/1/07 - 12/31/07		\$ 5,409,711 AF (\$4,111,380 SF) (\$1,298,331 OF)
Option Year 2	1/1/08-6/30/08		
Option Year 2	7/1/08 - 12/31/08		

* AF denotes Award Fee
 ** SF denotes Subjective Fee
 ***OF denotes Objective Fee

(End of Clause)

B.4 ALLOWABLE ITEMS OF COST (MSFC 52.242-90) (FEB 2001)

(a) In accordance with advance agreement between the Government and the Contractor for this contract, allowable costs for the items listed below are subject to the ceilings shown:

Ceilings on General And Administrative Costs-



B.5 PREMIUM FOR SCHEDULED OVERTIME (MSFC--52.222-90) (FEB 2001)

Pursuant to the clause entitled "Payment for Overtime Premiums," the amount of overtime premium authorized shall not exceed the amount specified below for the indicated period.



(END OF CLAUSE)

B.6 CONTRACT FUNDING (1852.232-81) (JUN 1990)

(a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is \$589,619,589. This allotment is for performance in all areas and covers the following estimated period of performance: contract award through June 13, 2007.

(b) An additional amount of \$31,380,443 is obligated under this contract for payment of fees.

(c) Recapitulation of funding is as follows:

	<u>Previous</u>	<u>This Action</u>	<u>Total</u>
Estimated Cost	\$589,645,891	(\$26,302)	\$589,619,589
Shared Savings Fee	\$0	\$0	
Provisional Award Fee (Funded at 75%)	\$8,431,609	\$26,302	\$8,457,911
Award Fee Earned	<u>\$22,922,532</u>	<u>\$0</u>	<u>\$22,922,532</u>
Total Sum Allotted*	\$621,000,032	\$0	\$621,000,032

*The contractor shall not expend an amount greater than the total of Estimated Cost, Earned Award Fee, and Potential Award Fee associated with CLIN 001 prior to January 1, 2007.

(End of clause)

B.7 INDEFINITE DELIVERY/REQUIREMENTS

(a) The completion effort (definite quantity) of this contract is considered to be those services negotiated for the estimated cost and fees for the basic contract period and each priced option period. Work that cannot be sufficiently identified, predetermined, or quantified is identified as Requirements work.

(b) Requirements work is specified as that effort that exceeds the performance bands specified in PWS sections 5.1, MSFC Applications and Web Services, and 3.9.4 and 5.10.4, Maintenance.

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- b. Perform scheduled Preventive Maintenance (PM) checks and repair equipment malfunctions in accordance with approved Operability/Maintainability Plan (prepared in accordance with DRD 974RM-001).
- c. Install and relocate IT computer equipment.
- d. Maintain systems through engineering changes and updates.

5.4 TELECOMMUNICATIONS SERVICES

The contractor shall provide telecommunications services to support the MSFC customers. These include telephone, facsimile, and other services.

5.4.1 Telephone Service

The contractor shall provide telephone services at MSFC. These services include operation/maintenance of existing capabilities, development or acquisition of enhancements, and implementation of enhancements. In providing this service, the contractor shall:

- a. Operate and maintain the telephone and voice mail systems and associated equipment.
- b. Provide telephones and associated features such as call forwarding, conferencing, call pickup, transfer, voice mail, and other features.
- c. Install, relocate, configure, and maintain the telephone instruments and other end-service equipment and capabilities.
- d. Install, configure, and maintain small conferencing units for the office environment.
- e. Provide overhead paging service capable of broadcasting voice messages in specified areas.
- f. Provide pager services, cellular telephones and wireless communication services for authorized personnel.
- g. Operate and maintain the voice over Internet Protocol (IP).
- h. Provide specification of requirements, design, implementation, procurement, and operations of local telephone service, including dial-tone, inbound/outbound trunking, fiber to near-site locations, and access to 911.
- i. Provide specification of requirements, design and interface to long distance switched voice and data services, provided by FTS2001.
- j. Provide operator assistance for placing international calls, directory assistance, and other operator-required functions.
- k. Compile and prepare the MSFC Telephone Directory (DRD 974MA-007).
- l. Provide and maintain telephone service for fire rescue locations as designated by the MSFC Safety Office. Fire rescue locations are designated in multi-story buildings to assist the handicapped with evacuation in case of a fire.

- m. Provide, test, and maintain power fail telephones. Power fail telephone circuits do not connect to or go through the MSFC telephone system. The power fail telephones shall operate in the event the MSFC telephone system loses power or becomes inoperable.

5.4.2 Facsimile Service

The contractor shall provide facsimile services at MSFC. These services include maintenance of existing capabilities, development or acquisition, and implementation of enhancements. In providing this service, the contractor shall:

- a. Maintain the existing facsimile machines and services.
- b. Procure, install and maintain facsimile hardware and services including those appropriate for the transmission of Government classified documents.
- c. Procure, install and maintain facsimile hardware and software to integrate this service with MSFC electronic mail services.

5.4.3 Other Services

The contractor shall provide other services required to meet customer requirements. These services include maintenance of existing capabilities, development or acquisition, and implementation of enhancements. In providing these services, the contractor shall:

- a. Provide fixed, portable, and mobile radios.
- b. Provide radio frequency spectrum management service.
- c. Provide and maintain interbuilding cable systems and system documentation (DRD 974MA-007).
- d. Provide and maintain the Emergency Warning System (EWS), the Marshall Access Control System (MACS), and the Video MACS (VMACS).
- e. Provide emergency telecommunications and operations support services during disaster/emergency situations such as fire, explosion, accident, bomb threat, civil disturbance, terrorist-related incidents, flood, ice, snow, and tornadoes.
- f. Operate and maintain a central distribution capability for voice, video, and data products (incoming and generated).
- g. Provide and maintain dedicated transmission services between local customers and host computer systems.
- h. Provide and maintain cable distribution systems and system documentation (DRD 974MA-007).
- i. Provide, set up, and maintain portable audio-visual equipment for special events.
- j. Design, develop, implement and maintain conference room capabilities.

5.11 MICHLOUD ASSEMBLY FACILITY (MAF) IT SERVICES

The contractor shall provide IT services to support the Michoud Assembly Facility (MAF) customers. These services include telecommunications services and local area network services.

5.11.1 Telecommunication Service

The contractor shall provide telecommunication services at MAF. These services include telephone services, FAX services and other telecommunication services.

5.11.1.1 Telephone Services

- e. Operate and maintain the telephone and voice mail systems and associated equipment.
- f. Provide telephones and associated features such as call forwarding, conferencing, call pickup, transfer, voice mail, and other features.
- g. Install, relocate, configure, and maintain the telephone instruments and other end-service equipment and capabilities.
- h. Install, configure, and maintain small conferencing units for the office environment.
- i. Provide overhead paging service capable of broadcasting voice messages in specified areas.
- j. Provide pager services, cellular telephones and wireless communication services for authorized personnel.
- k. Operate and maintain the voice over Internet Protocol (IP) systems.
- l. Provide specification of requirements, design, implementation, procurement, and operations of local telephone service, including dial-tone, inbound/outbound trunking, fiber to near-site locations, and access to 911.
- m. Provide specification of requirements, design and interface to long distance switched voice and data services, provided by FTS2001.
- n. Provide, test, and maintain power fail telephones. Power fail telephone circuits do not connect to or go through the MAF telephone system. The power fail telephones shall operate in the event the MAF telephone system loses power or becomes inoperable.

5.11.1.2 Facsimile Service

The contractor shall provide facsimile services that include MAF facsimile. These services include maintenance of existing capabilities, development or acquisition, and implementation of enhancements. In providing this service, the contractor shall:

- a. Maintain the existing facsimile machines and services.
- b. Procure, install and maintain facsimile hardware and services.

- c. Procure, install and maintain facsimile hardware and software to integrate this service with MAF electronic mail services.

5.11.1.3 Other Telecommunications Services

The contractor shall provide other services required to meet customer requirements. These services include maintenance of existing capabilities, development or acquisition, and implementation of enhancements. In providing these services, the contractor shall:

- a. Provide fixed, portable, and mobile radios.
- b. Provide radio frequency spectrum management service.
- c. Provide and maintain interbuilding cable systems and system documentation (DRD 974MA-007).
- d. Provide and maintain the MAF Access Control System (MACS), and the Video MACS (VMACS).
- e. Provide emergency telecommunications and operations support services during disaster/emergency situations such as fire, explosion, accident, bomb threat, civil disturbance, terrorist-related incidents, flood, ice, snow, and tornadoes.
- f. Provide and maintain dedicated transmission services between local customers and host computer systems.
- g. Provide, set up, and maintain portable audio-visual equipment for special events.

5.11.2 Local Area Network (LAN)

The contractor shall provide IT requirements evaluation, engineering, software and hardware maintenance, operations, and system administration for MAF LAN services and LAN systems.

5.11.2.1 LAN Systems

In support of the infrastructure systems, the contractor shall:

- a. Engineer, operate and maintain MAF routers, firewalls, switches, Virtual Private Network (VPN) and dial-in devices.
- b. Engineer, operate and maintain network peripherals, such as scanners, wireless access points and other network based systems.
- c. Engineer, operate and maintain infrastructure server systems, including, domain, domain controllers for Active Directory, and other servers supporting core network functions (see services below).

5.11.2.2 LAN Services

In support of the LAN services, the contractor shall:

- a. Maintain the Domain Name Service (DNS) and Dynamic Host Control Protocol (DHCP).
- b. Operate and maintain the VPN server and client software and Dial-in service.
- c. Provide port-level security (switch level) administration.
- d. Provide wireless access services engineering and maintenance.
- e. Provide IP address management for assigned address space.

5.11.3 MAF Facility Modeling

The contractor shall model the interior plant layout of designated MAF facilities. The work shall include on site digital scanning, data collection, and 3D solid modeling. The developed model shall include vertical structural members, large permanent interior structures (office spaces, partition walls, etc.), large electrical or equipment control boxes mounted to vertical structures, and overhead cranes and trolleys. Geometry shall be represented at least at a bounding box level that is sufficient to allow for an analysis of available space. The final model shall be provided in a format compatible with DELMIA digital manufacturing software.

APPENDIX A SYSTEMS RESPONSIBILITIES

Category I. CIO Managed Systems for which the Contractor shall have Systems Manager Responsibilities

SERVICE TYPE	SYSTEM NAME	CURRENT MODEL
MSFC Services	Internet Gateway	Sun
	Midrange Computer Systems	IBM RS6000, Compaq DL380, SGI, HP DEC Alpha, Sun
	Test Area Systems	HP Alpha, PCs, MODCOMP
	MSFC Telephone Systems	EADS Northern Telecom PointSpan
	MAF Telephone Systems	EADS Northern Telecom PointSpan
	MAPTIS Systems	Compaq NT and DEC Alpha
	MAPTIS II System	Dell Precision 420 Dual CPU
	Video MSFC Access Control System	Lenel
	MSFC Access Control System	LYNX Intel
	Radio, Paging & EWS	see DRD 974RM-001
	Audio/Video Systems	see DRD 974RM-001
	Infrastructure Security Services (Firewalls, ACE authentication services, risk assessment and scanning)	Cisco, Solaris, Win2K, Linux, SGI, Nokia/Checkpoint
	NSSTC Infrastructure	Cisco (IOS, CAT OS, embedded), W2K/NT4/W98, SGI, Linux
	NSSTC User Applications Systems Support	SGI, Linux, OpenVMS, W2K, Solaris
	MAF Local Area Network	Cisco routers, switches and firewalls, patch panels, Cisco Works, network and IT security related services, and fiber transceivers

**APPENDIX A
SYSTEMS RESPONSIBILITIES (CON'T)**

SERVICE TYPE	SYSTEM NAME	CURRENT MODEL
Agencywide Services	All Development Tools	see DRD 974RM-001
	NACC	IBM 9672-RB6, IBM 3490, IBM 3480, STK 9500, STK VSM, STK 9310, Sun V880, IBM P series
	Midrange Computer	IBM RISC 6000, Compaq, Sun, Dell 2650, Sun V480
	<i>IEMP</i>	Compaq DL-360, DL-380 Compaq 1850R, 3000, 6000, 6500 and 7000 Dec Alpha 4100 and 8400 Sun E10000, Sun 6500, Sun 4500, Sun 450, Sun V880, Sun SPARC 2 and 10, Sun Ultra 5, 10 and 60 Various Gateway and Micron Workstation class servers

**APPENDIX A
SYSTEMS RESPONSIBILITIES (CON'T)**

SERVICE TYPE	SYSTEM NAME	CURRENT MODEL
Agencywide NISN	PSLA database NISN Service Request System	SUN UNIX, Remedy
	Intrusion detection sensors	CISCO PIX, Checkpoint
	Video Teleconferencing System (ViTS) ViTS Rollabout (VRA) system	Video codecs, viewstations, mixers, Audio/Video cassette recorders, cameras, video controllers, remote controls, character generators, terminal servers, video monitors, amplifiers, display units, document cameras, audio/video matrix switch, camera controllers, echo cancellers, plasma screens, touch screens, projectors, multipoint control unit (MCU); Polycom
	Video Conferencing Reservation system (VCRS)	Oracle with web interface. NT server with access to an ADE RISC 6000 database server
	Voice Teleconferencing Systems	Polycom voice conferencing units, audio modules, audio mixers, audio synchronizers
Voice Teleconferencing Service	Polycom, Shure, Gentner audioconferencing units	

**APPENDIX A
SYSTEMS RESPONSIBILITIES (CON'T)**

SERVICE TYPE	SYSTEM NAME	CURRENT MODEL
Agencywide NISN, con't	Mission Voice Switching System (VSS)	2048 port digital switch
	Routed Data Service	Cisco/Juniper/Bay routers, patch panels, modems, fiber modems/multiplexers/repeaters, inverse multiplexers, channel service units, channel banks, CSU/DSUs, disk drives
	Mission Network Service Assurance Plan (NSAP) backbone	Conversion devices
	High Rate Data/Video Service System	Statistical Multiplexer
	NASA Directory Service	Sun Solaris, Syntegra Mail*Hub
	NISN Activity and Outage Posting and Notification System (AOPNS) NISN Mission outage notification system (MONS) Flash Reporting System	Sun UNIX
	Enterprise Network Management Center (ENMC)	Sun SPARCstations

**APPENDIX A
SYSTEMS RESPONSIBILITIES (CON'T)**

Category II. CIO Managed Systems for which the Contractor shall have Limited Responsibilities

SERVICE TYPE	SYSTEM NAME	RESPONSIBILITIES
MSFC Information Services	Photographic and Visual Service System	Operations
	IES	Software Maintenance & Sustaining Engineering
Agencywide	Secure voice teleconferencing system	Operations & Maintenance
	SMARTCards	Operations & Maintenance

Category III. Non-CIO Managed Systems for which Contractor shall have Limited Responsibilities

SERVICE TYPE	SYSTEM NAME	RESPONSIBILITIES
MSFC Information Services	User owned midrange	Operations, and Maintenance
	All other MSFC IT Computer Equipment (except HOSC)	Hardware Maintenance (see DRD 974RM-001)
Agencywide, NISN	Voice teleconferencing service	Interface with provider & reporting
	VoTS scheduling system	Interface with provider & reporting
	NISN Mission video system	Interface with provider & reporting
	Video Teleconferencing Service	Interface with provider & reporting
	WAN Transmission Services	Interface with provider & reporting
	High Rate Data/Video Service System	Interface with provider & reporting
	FAX Broadcast Service	Interface with provider & reporting

APPENDIX B APPLICATIONS/WEB CATEGORY DESCRIPTIONS

CATEGORY	DESCRIPTION
1	NASA-wide or MSFC-wide application service or web site, critical or highly visible or complex application/web service.
2	Medium scale application service or web site, less complex, with medium criticality
3	Administrative and support application service/web site, or small user community