folder: NNG07HW03C

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NNG07HW03C Very Long Baseline Interferometry VLBI Basic

SCAN

OMB APPROVAL #: 2700-0042

AWARD/CONTRACT	1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350) ⇒	RATING DO-C9	PAGE 1 OF PAGES 48
2. CONTRACT NO. (*Proc. Inst. Ident.*) NO. NNG07HW03C	3. EFFECTIVE DATE 01/01/2007	4. REQUISITION/PURCHASE REQUEST/PROJECT NO. 4200181658	

5. ISSUED BY: CODE 210.5
National Aeronautics and Space Administration
Goddard Space Flight Center, Code 210.5
Earth Sciences Procurement Office
Greenbelt, MD 20771

6. ADMINISTERED BY (*If other than item 5*) CODE 210.5
National Aeronautics and Space Administration
Goddard Space Flight Center, Code 210.5
Earth Sciences Procurement Office
Greenbelt, MD 20771

7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP
NVI, Inc.
7257 Hanover Parkway, Suite D
Greenbelt, MD 20770

CODE ONWP5 FACILITY CODE

8. DELIVERY ☐ FOB ORIGIN ☒ OTHER 9. DISCOUNT FOR PROMPT

10. SUBMIT INVOICES (*4 copies unless other-wise specified*) TO THE ADDRESS SHOWN IN: ⇒ ITEM 12

11. SHIP TO/MARK FOR CODE
See Clause E.1 Acceptance-single location

12. PAYMENT WILL BE MADE BY: CODE 155
NASA Goddard Space Flight Center
Cost and Commercial Accounts Department
Code 155/Bldg 17
Greenbelt, MD 20771

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN N/A
☒ 10 U.S.C. 2304(c) ☐ 41 U.S.C. 253(c)

14. ACCOUNTING AND APPROPRIATION DATA
BNC: GED PPC: GF PR: 4200181658

15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QTY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
	Very Long Baseline Interferometry (VLBI) service in support of Code 698. See Attachment A-Statement of Work.				Maximum Value $10,000,000
				15G. TOTAL AMOUNT OF CONTRACT ⇒	$

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CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17 ☒ CONTRACTOR'S NEGOTIATED AGREEMENT (*Contractor is required to sign this document and return* 1 *copies to issuing office.*)
Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents (s) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (*Attachments are listed herein.*)

18. ☒ AWARD (*Contractor is not required to sign this document.*) Your offer on Solicitation Number NNG06133383R, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. NAME AND TITLE OF SIGNER (*Type or print*)
John M. Gipson, President, NVI, Inc.

20A. NAME OF CONTRACTING OFFICER
Steven T. Kramer

19B. NAME OF CONTRACTOR
BY John M Gipson
(*Signature of person authorized to sign*)

19C. DATE SIGNED
Dec 21, 2006

20B. UNITED STATES OF AMERICA
BY Steven T Kramer
(*Signature of Contracting Officer*)

20C. DATE SIGNED
12/21/06

FILE COPY

NASA Contract
No. NNG07HW03C
Basic Award

Continuation of Block 14 from Standard Form 26

14. ACCOUNTING AND APPROPRIATION

PR Numbers	Total Amount
4200133383	$ 0
4200181658	$100,000

Total Amount Funded: $100,000

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SECTION B OF NNG07HW03C
SUPPLIES OR SERVICES AND PRICE/COST

B. 1 DELIVERABLE REQUIREMENTS (GSFC 52.211-90) (OCT 1988)

The Contractor shall perform and/or deliver the following:

Item	*Description*	*Reference*	*Schedule*
1	Services and Deliverables In Accordance With Statement of Work and Task Orders	As defined in individual task orders.	As defined in individual task orders.
2	Task Plans	Clauses B.10, H.7	5-15 days after receipt of request for task plan
3	Monthly and Quarterly Progress Reports	Clause C.3	15th calendar day of each month
4	Final Task Report	Clause C.2	Within 30 days of task completion
5	NASA Financial Management Reports	Clauses G.1, G.10	Monthly and Quarterly
6	DD Form 1419 - DOD Industrial Plant Equipment Requisition	Clause G.11	30 days prior to item need date
7	Financial Report of NASA Property in the Custody of Contractors (NF 1018)	Clause G.13	Annual Report Due By October 15th and Final Report Due As Specified
8	Safety & Health Reporting	Clause H.1 Clause 1852.223-70, & Clause H.5	As required
9	GSFC Form 24-27 (LISTS Form) & NASA Form 531 (Name Check Request)	Clause H.2	As required
10	LISTS Report	Clause H.2	10th calendar day of each month
11	Equal Opportunity Reports	Clause I.1, 52.222-26	As Specified
12	Insurance Notification	Clause I.1, 52.228-7 & I.10	As required
13	Subcontract Notification	See Clause I.1 52.244-2, Alt. I	30 days prior to subcontract award date
14	IT Security Plan	See Clause I.1 1852.204-76	30 days after contract award
15	Foreign Travel Requests and Trip Reports	Clause G.9 1852.242-71	30 days in advance of the start of the travel and reports 30 days after the conclusion of the travel, respectfully

16	DD Form 1149, Requisition and Invoice/Shipping Document	See Clause G.12 1852.245-71	Within 5 working days after receipt of the property by the contractor
17	Reports of Reportable Items and Disclosure of Inventions	See Clause G.8 1852.227-72 & Clause I.1 52.227-11	As required
18	VETS 100 Reporting	See Clause I.1 52.222-37	September 30th of each year

(End of clause)

B. 2 MINIMUM/MAXIMUM AMOUNT OF SUPPLIES OR SERVICES (COST REIMBURSEMENT) (GSFC 52.216-90) (JUL 2006)

(a) The minimum amount of supplies or services that shall be ordered during the effective period of this contract is $1,000,000 **(Estimated Cost and Fixed Fee)**. The maximum amount of supplies or services that may be ordered during the effective period of this contract is $10,000,000 **(Estimated Cost and Fixed Fee)**. All orders placed under this contract will be applied to the minimum and maximum specified in this paragraph.

(b) The minimum amount is reached when the sum of the dollar amounts of all ordered supplies or services, except for any adjustments made pursuant to the Limitation of Cost or Limitation of Funds clause, equals or exceeds the minimum amount stated in paragraph (a).

(c) The maximum amount is reached when the sum of the dollar amounts of all ordered supplies or services, except for any adjustments made pursuant to the Limitation of Cost or Limitation of Funds clause, equals the maximum amount stated in paragraph (a).

(d) The maximum amount, if reached, precludes the issuance of further orders for supplies or services under this contract. However, reaching the maximum amount does not preclude adjustments to the dollar amounts of existing placed orders, for actions that are within the scope of the placed orders, and which are made pursuant to existing contract authority, such as the Changes clause.

(e) The maximum amount may be adjusted unilaterally by the Government on an annual basis. Historic, current, and/or projected workload requirements will be used to determine the amount of upward adjustment. In no event will the adjusted maximum amount exceed 10% of the original maximum amount.

(End of clause)

B. 3 LIMITATION OF INDIRECT COSTS (GSFC 52.231-90) (JUL 2006)

a. Within each of the Contractor's fiscal years, the Contractor shall not charge or be reimbursed by the Government, under this or any other Government contract, for indirect costs in excess of the individual

indirect expense dollars derived by the application of the following indirect cost ceiling rates to the appropriate base(s) set forth below.

Indirect Cost	Base of Application	CFY1	CFY2	CFY3	CFY4	CFY5	CFY6
Onsite Overhead [includes fringe]	Direct Labor						
Offsite Overhead [includes fringe]	Direct Labor						
G&A	Direct Labor, Overhead & ODCs						

*CFY (Contractor Fiscal Year) = January to December

b. The limitations may be adjusted at the discretion of the Contracting Officer to the extent that increases to the Contractor's indirect costs are caused by:

(i) New or revised statutes and court decisions and/or written ruling or regulation by the Internal Revenue Service or any other taxing authority.

(ii) Wage determinations and/or regulations issued by the Department of Labor pursuant to the Service Contract Act of 1965, as amended.

c. A proposal for any adjustment under paragraph (b) must be in sufficient detail to establish that the cause of the amount of adjustment requested was solely due to the permitted conditions stated in the paragraph. It must be submitted no later than 60 days after the condition(s) become known, or should have become known, to the Contractor. The amount of adjustment, if any, is at the discretion of the Contracting Officer and shall not be subject to the Disputes clause.

(End of clause)

B. 4 ESTIMATED COST INCREASES (GSFC 52.232-94) (DEC 2005)

(a) The Contractor shall notify the Contracting Officer in writing when the Contractor has reason to believe that the total cost for performance of this contract, or any individual task order, exclusive of any fee, will be either greater or substantially less than the total estimated cost stated in this contract or in the task order. Notification shall not be delayed pending preparation of a proposal.

(b) A proposal is required to support a request for an increase in the estimated cost of the contract or the task order. The proposal should be submitted as soon as possible after the above notification but no later than 115 days before the incurred costs are expected to exceed the estimated cost. This will allow

adequate time for the Government to evaluate the proposal and to mutually establish any increase in estimated cost with the Contractor.

(c)(1) The proposal shall be submitted in the following format unless some other format is directed or approved by the Contracting Officer:

Incurred costs to date
Projected cost to completion
Total cost at completion
Current negotiated estimated cost
Requested increase in estimated cost

(2) The "projected cost to completion" shall consist of the following "other than cost or pricing data" unless the Contracting Officer requests or approves the submittal of a greater or lesser amount of information:

(i) Elements of cost with supporting detail for estimated direct labor hours, direct and indirect rates, materials and subcontracts, and other elements.

(ii) Supporting explanation for the increases and projections, sufficient for the Government to understand the reasons for the increased estimated cost.

(End of clause)

B. 5 ORDERING (52.216-18) (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from the award date of this contract through a five (5) year period afterwards (the effective ordering period).

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(End of clause)

B. 6 ORDER LIMITATIONS (52.216-19) (OCT 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than $1,000, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor--

(1) Any order for a single item in excess of $3,000,000;

(2) Any order for a combination of items in excess of $3,000,000; or

(3) A series of orders from the same ordering office within 30 days that together call for quantities exceeding the limitation in subparagraph (1) or (2) above.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) above.

(d) Notwithstanding paragraphs (b) and (c) above, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 5 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(End of clause)

B. 7 INDEFINITE QUANTITY (52.216-22) (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum". The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after one year from the end of the contract's effective ordering period.

(End of clause)

B.8 ESTIMATED COST AND FIXED FEE (1852.216-74) (DECEMBER 1991)

The estimated cost of this contract is $**(to be negotiated by task orders)** exclusive of the fixed fee of $**(to be negotiated by task orders)**. The total estimated cost and fixed fee is $**(to be negotiated by task orders)**.

(End of clause)

B.9 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 **$92,593**. This allotment is for cost and covers the following estimated period of performance: January 1, 2007 through February 1, 2007.

(b) An additional amount of **$7,407** is obligated under this contract for payment of fee.

(End of clause)

B.10 SUPPLEMENTAL TASK ORDERING PROCEDURES

(a) When the Government issues a request for a "task plan" to the Contractor in accordance with the Clause entitled "Task Ordering Procedure" of this contract, the Contractor shall prepare its estimate of the labor hours, labor categories, indirect costs, and other direct costs required to perform the task order requirements. The Contractor shall use the labor categories and labor and indirect rates that shall not exceed the rates listed in Attachment E to calculate the proposed estimated cost to perform the task order requirements.

(b) The Contractor agrees that only those appropriate labor and indirect cost rates, which may be less than but shall not exceed the rates found in the applicable Attachment E, shall be used to calculate the proposed estimated costs for all task orders issued in accordance with the "Task Ordering Procedure" clause of this contract. The Contractor's proposed approach/pricing of the representative tasks set forth in its proposal for award of this contract shall be used as reference by the Contracting Officer in negotiating tasks with the Contractor, which are issued under this contract, but only to the extent portions of a representative task are relevant to portions of a task actually issued.

(c) The Government and Contractor agree that the fixed fee percentage specified in Attachment E shall be used to calculate the fixed fee dollars on all task orders issued in accordance with the "Task Ordering Procedure" clause of this contract.

(End of Text)

SECTION C OF NNG07HW03C
DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C. 1 SCOPE OF WORK (GSFC 52.211-91) (FEB 1991)

The Contractor shall provide the personnel, materials, and facilities, except as otherwise specified in this contract, necessary to perform the work and to furnish the items specified in Section B of this contract in accordance with the Statement of Work (Section J, Attachment A) and task orders issued hereunder.

(End of clause)

C. 2 FINAL SCIENTIFIC AND TECHNICAL REPORTS (1852.235-73) (DEC 2005)

(a) The Contractor shall submit to the Contracting Officer a final report that summarizes the results of the entire contract, including recommendations and conclusions based on the experience and results obtained. The final report should include tables, graphs, diagrams, curves, sketches, photographs, and drawings in sufficient detail to explain comprehensively the results achieved under the contract.

(b) The final report shall be of a quality suitable for publication and shall follow the formatting and stylistic guidelines contained in NPR 2200.2, Guidelines for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information. Electronic formats for submission of reports should be used to the maximum extent practical. Before electronically submitting reports containing scientific and technical information (STI) that is export-controlled or limited or restricted, contact the Contracting Officer to determine the requirements to electronically transmit these forms of STI. If appropriate electronic safeguards are not available at the time of submission, a paper copy or a CD-ROM of the report shall be required. Information regarding appropriate electronic formats for final reports is available at http://www.sti.nasa.gov under "Publish STI – Electronic File Formats."

(c) The last page of the final report shall be a completed Standard Form (SF) 298, Report Documentation Page.

(d) In addition to the final report submitted to the Contracting Officer, the Contractor shall concurrently provide to the Center STI/Publication Manager and the NASA Center for AeroSpace Information (CASI) a copy of the letter transmitting the final report to the Contracting Officer. The copy of the letter shall be submitted to CASI at the following address:

Center for AeroSpace Information (CASI)
Attn: Acquisitions Collections Development Specialist
7121 Standard Drive
Hanover, Maryland 21076-1320

(e) In accordance with paragraph (d) of the Rights in Data --General clause (52.227-14) of this contract, the Contractor may publish, or otherwise disseminate, data produced during the performance of this contract, including data contained in the final report, and any additional reports required by 1852.235-74 when included in the contract, without prior review by NASA. The Contractor is responsible for

reviewing publication or dissemination of the data for conformance with laws and regulations governing its distribution, including intellectual property rights, export control, national security and other requirements, and to the extent the contractor receives or is given access to data necessary for the performance of the contract which contain restrictive markings, for complying with such restrictive markings. Should the Contractor seek to publish or otherwise disseminate the final report, or any additional reports required by 1852.235-74 if applicable, as delivered to NASA under this contract, the Contractor may do so once NASA has completed its document availability authorization review, and availability of the report has been determined.

(End of clause)

C. 3 ADDITIONAL REPORTS OF WORK--RESEARCH AND DEVELOPMENT (1852.235-74) (FEB 2003)

In addition to the final report required under this contract, the Contractor shall submit the following report(s) to the Contracting Officer:

(a) Monthly progress reports. The Contractor shall submit separate monthly reports of all work accomplished during each month of contract performance by task order. Reports shall be in narrative form, brief, and informal. They shall include a quantitative description of progress, an indication of any current problems that may impede performance, proposed corrective action, and a discussion of the work to be performed during the next monthly reporting period.

(b) Quarterly progress reports. The Contractor shall submit separate quarterly reports of all work accomplished during each three-month period of contract performance by task order. In addition to factual data, these reports should include a separate analysis section interpreting the results obtained, recommending further action, and relating occurrences to the ultimate objectives of the contract. Sufficient diagrams, sketches, curves, photographs, and drawings should be included to convey the intended meaning.

(c) Submission dates. Monthly and quarterly reports shall be submitted by the 15th day of the month following the month or quarter being reported. If the contract is awarded beyond the middle of a month, the first monthly report shall cover the period from award until the end of the following month. No monthly report need be submitted for the third month of contract effort for which a quarterly report is required. No quarterly report need be submitted for the final three months of contract effort since that period will be covered in the final report. The final report shall be submitted within 30 days after the completion of the effort under the contract.

The Contractor shall submit the reports required by this clause as follows:

[M=Monthly, Q=Quarterly, F=Final]

E. 1 ACCEPTANCE--SINGLE LOCATION (GSFC 52.246-92) (SEPT 1989)

The Contracting Officer or authorized representative will accomplish acceptance at NASA/Goddard Space Flight Center. For the purpose of this clause, the Contracting Officer's Technical Representative named in this contract is the authorized representative. The Contracting Officer reserves the right to unilaterally designate a different Government agent as the authorized representative. The Contractor will be notified by a written notice or by a copy of the delegation of authority if different representative is designated.

(End of clause)

E. 2 INSPECTION SYSTEM RECORDS (GSFC 52.246-102) (OCT 1988)

The Contractor shall maintain records evidencing inspections in accordance with the Inspection clause of this contract for five years after delivery of all items and/or completion of all services called for by the contract.

(End of clause)

E. 3 INSPECTION SYSTEM (SUBCONTRACTS) (GSFC 52.246-100) (JULY 2000)

In performance of this contract, the Contractor shall impose inspection system requirements on subcontractors and suppliers to ensure the required quality of supplies or services. Monitoring of the Contractor's system for inspecting subcontractors will be accomplished through the combined efforts of NASA/GSFC personnel and the delegated Government agency. The authority and responsibility of the delegated agency will be defined in a letter of contract administration delegation.

(End of clause)

E. 4 INSPECTION OF SERVICES--COST-REIMBURSEMENT (52.246-5) (APR 1984)

(a) Definition. "Services," as used in this clause, includes services performed, workmanship, and material furnished or used in performing services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all places and times during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If any of the services performed do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, for no additional fee. When the defects in services cannot be corrected by reperformance, the Government may (1) require the Contractor to take necessary action to ensure that future performance conforms to contract requirements and (2) reduce any fee payable under the contract to reflect the reduced value of the services performed.

(e) If the Contractor fails to promptly perform the services again or take the action necessary to ensure future performance in conformity with contract requirements, the Government may (1) by contract or otherwise, perform the services and reduce any fee payable by an amount that is equitable under the circumstances or (2) terminate the contract for default.

(End of clause)

SECTION F OF NNG07HW03C
DELIVERIES OR PERFORMANCE

F. 1 FIXED FEE (52.216-8) (MAR 1997)

(a) The Government shall pay the Contractor for performing this contract the fixed fee specified in the Schedule.

(b) Payment of the fixed fee shall be made as specified in the Schedule; provided that after payment of 85 percent of the fixed fee, the Contracting Officer may withhold further payment of fee until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interest. This reserve shall not exceed 15 percent of the total fixed fee or $100,000, whichever is less. The Contracting Officer shall release 75 percent of all fee withholds under this contract after receipt of the certified final indirect cost rate proposal covering the year of physical completion of this contract, provided the Contractor has satisfied all other contract terms and conditions, including the submission of the final patent and royalty reports, and is not delinquent in submitting final vouchers on prior years' settlements. The Contracting Officer may release up to 90 percent of the fee withholds under this contract based on the Contractor's past performance related to the submission and settlement of final indirect cost rate proposals.

(End of clause)

F. 2 PLACE OF PERFORMANCE--SERVICES (GSFC 52.237-92) (OCT 1988)

The services specified by this contact shall be performed at GSFC, Greenbelt, Maryland. However, additional services may require performance at a site other than GSFC. The place of performance will be specified on individual task orders.

(End of clause)

F. 3 SHIPPING INSTRUCTIONS--CENTRAL RECEIVING (GSFC 52.247-94) (JUN 2006)

Shipments of the items required under this contract shall be to:

Receiving Officer
Building 16W
Code 279
Goddard Space Flight Center
Greenbelt, Maryland 20771

Marked for:

Technical Officer (Chopo Ma) Code 698
Building 33 Room G212
Contract No. NNG07HW03C
Item(s) No.

Compliance with this clause is necessary to assure verification of delivery and acceptance and prompt payment.

(End of clause)

F. 4 STOP-WORK ORDER (52.242-15) (AUG 1989) --ALTERNATE I (APR 1984)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work order is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Termination clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other terms of the contract that may be affected.

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(End of clause)

F. 5 F.O.B. DESTINATION (52.247-34) (NOV 1991)

(a) The term "f.o.b. destination," as used in this clause, means--

(1) Free of expense to the Government, on board the carrier's conveyance, at a specified delivery point where the consignee's facility (plant, warehouse, store, lot, or other location to which shipment can be made) is located, and

(2) Supplies shall be delivered to the destination consignee's wharf (if destination is a port city and supplies are for export), warehouse unloading platform, or receiving dock, at the expense of the Contractor. The Government shall not be liable for any delivery, storage, demurrage, accessorial, or other charges involved before the actual delivery (or "constructive placement" as defined in carrier tariffs) of the supplies to the destination, unless such charges are caused by an act or order of the Government acting in its contractual capacity. If rail carrier is used, supplies shall be delivered to the specified unloading platform of the consignee. If motor carrier (including "piggyback") is used, supplies shall be delivered to truck tailgate at the unloading platform of the consignee, except when the supplies delivered meet the requirements of Item 568 of the National Motor Freight Classification for "heavy or bulky freight". When supplies meeting the requirements of the referenced Item 568 are delivered, unloading (including movement to the tailgate) shall be performed by the consignee, with assistance from the truck driver, if requested. If the Contractor uses rail carrier or freight forwarder for less than carload shipments, the Contractor shall ensure that the carrier will furnish tailgate delivery, when required, if transfer to truck is required to complete delivery to consignee.

(b) The Contractor shall--

(1)(i) Pack and mark the shipment to comply with contract specifications; or

(ii) In the absence of specifications, prepare the shipment in conformance with carrier requirements;

(2) Prepare and distribute commercial bills of lading;

(3) Deliver the shipment in good order and condition to the point of delivery specified in the contract;

(4) Be responsible for any loss of and/or damage to the goods occurring before receipt of the shipment by the consignee at the delivery point specified in the contract;

(5) Furnish a delivery schedule and designate the mode of delivering carrier; and

(6) Pay and bear all charges to the specified point of delivery.

(End of clause)

F.6 EFFECTIVE ORDERING PERIOD

The Government may issue tasks for a period of five (5) years from the effective date of the contract. Task Orders shall not be issued after expiration of this effective ordering period.

(End of text)

SECTION G OF NNG07HW03C
CONTRACT ADMINISTRATION DATA

G. 1 FINANCIAL MANAGEMENT REPORTING (GSFC 52.242-90)(FEB 2004)

(a) Requirements. This clause provides the supplemental instructions referred to in NASA FAR Supplement (NFS) clause 1852.242-73. The NFS clause and NASA Procedural Requirements (NPR) 9501.2D, "NASA Contractor Financial Management Reporting", establish report due dates and other financial management reporting requirements. NPR 9501.2D permits withholding of payment for noncompliance.

(b) Supplemental instructions. (1) Monthly (NF 533M) reports are required. Quarterly (NF 533Q) reports are also required. The reporting structure shall be in accordance with Attachment B of Section J of this contract.

(2) As stated in NPR 9501.2D, NASA strongly encourages electronic contractor cost reporting. The preferred formats are Excel and Adobe. Contact the Contracting Officer for any E-Mail addresses that are not provided or which become noncurrent.

Distribution shall be as follows:

Contracting Specialist, Code 210.Y
E-Mail: Antwan.G.Reid@nasa.gov

Contracting Officer's Technical Representative, Code 698
E-Mail: Chopo.Ma@nasa.gov

Resources Analyst, Code 603
E-Mail: Kimberly.A.Coles@nasa.gov

Regional Finance Office Cost Team, Code 155
E-Mail: rfocateam@listserv.gsfc.nasa.gov

Administrative Contracting Officer (if delegated)

(c) Web sites. (1) NPR 9501.2D, "NASA Contractor Financial Management Reporting":

http://nodis3.gsfc.nasa.gov/displayDir.cfm?Internal_ID=N_PR_9501_002D_&page_name=main

(2) NF 533 Tutorial: (for training purposes only)

http://cfo.gsfc.nasa.gov/nf533/nf533.htm

(End of clause)

G. 2 CONTRACTOR USE OF GSFC LIBRARY (GSFC 52.245-90) (AUG 1993)

The Contractor's professional employees performing work under this contract are granted borrowing privileges at the Goddard Space Flight Center (GSFC) Library.

(a) The Contractor shall establish procedures to account for borrowed materials and to ensure their timely return. "Timely return" means prior to the expiration of the borrowing period, prior to the termination of employment of the particular employee, or prior to the expiration of this contract, whichever comes first.

(b) The Contractor shall initiate borrowing privileges for its employees by contacting the GSFC Librarian. The Librarian will require the Contractor to provide the name and title of the company official responsible for ensuring compliance with (a) above. The responsible official will be required to indicate the level of control for the issuance of Library charge plates and whether the countersignature of the responsible company official will be required on Goddard Library Card Applications. The GSFC Librarian may impose additional information requirements if Library privileges are requested for employees that do not have permanent GSFC badges.

(c) The Contractor shall be responsible for all items lost, destroyed or not returned. Such items shall be immediately replaced by the Contractor at no cost to the Government. The GSFC Librarian may revoke library privileges at any time during the performance of the contract if the Contractor fails to comply with this clause or is experiencing an inordinate amount of loss or destruction of library materials. Discontinuance of library privileges shall not entitle the Contractor to an increase in the cost or price for contract performance or to any other adjustment to the contract.

(End of clause)

G. 3 PROPERTY CLAUSE APPLICABILITY--ON-SITE AND OFF-SITE (GSFC 52.245-96) (JULY 2004)

(a) Performance of this contract requires that contractor personnel and any furnished and/or acquired government property be located at both Government controlled and managed premises (on-site) and at contractor controlled and managed premises (off-site). The requirements for control and accountability of government property differ depending upon the location of the property. The applicability of the clauses in this contract to on-site and to off-site locations is indicated below.

(b) Clauses applicable to both on-site and off-site locations.

FAR clause 52.245-5, "Government Property (Cost Reimbursement, Time-and-Material, or Labor-Hour Contracts" except that paragraph (e) does not apply to on-site locations.

NASA FAR Supplement clause 1852.245-70, "Contractor Requests for Government-Owned Equipment".

GSFC clause 52.245-92, "Repair or Replacement of Government Property--Special Conditions", if included.

GSFC clause 52.245-97, "Contractor Acquired Property--NASA Conditions".

(c) Clauses applicable only to off-site locations.

NASA FAR Supplement clause 1852.245-73, "Financial Reporting of NASA Property in the Custody of Contractors"

NASA FAR Supplement clause 1852.245-76, "List of Government-Furnished Property", if included.

(d) Clauses applicable only to on-site locations.

NASA FAR Supplement clause 1852.245-71, "Installation-Accountable Government Property (Alternate I)".

NASA FAR Supplement clause 1852.245-77, "List of Installation- Accountable Property and Services".

GSFC clause 52.245-93, "Reports of Contractor Acquired Government Property"

(End of clause)

G. 4 CONTRACTOR ACQUIRED PROPERTY--NASA CONDITIONS (GSFC 52.245-97) (SEP 1998)

NASA FAR Supplement 1845.502-70 establishes general and specific conditions that apply to this contract for various categories of contractor acquired property.

(End of clause)

G. 5 REPAIR OR REPLACEMENT OF GOVERNMENT PROPERTY--SPECIAL CONDITIONS (GSFC 52.245-92) (SEP 1998)

(a) Government property categorized as facilities (defined at FAR 45.301 and NASA FAR Supplement 1845.301) has been provided for the performance of this contract.

(b) Except as specified in paragraph (e) below, the Government will not authorize the replacement of any defective Government property as a direct reimbursable cost under this contract. Replacement shall be at no cost to the Government except as may be permitted by FAR 31.205-11, "Depreciation." However, the Government may authorize and reimburse the repair of defective Government property as

stated in paragraph (c). If repair is not approved by the Contracting Officer, the Contractor agrees to replace any defective Government property with property owned or leased by the Contractor. However, such Contractor property need not be identical to the replaced property. Further, replacement may be waived by the Contracting Officer provided the Contractor submits a written request and demonstrates to the satisfaction of the Contracting Officer that the capability to perform the contract in an acceptable and efficient manner is not degraded.

(c) The Government may reimburse the reasonable direct cost for the repair of any Government property for which repair is determined to be an acceptable alternative. In accordance with FAR clause 52.245-5, the Contractor is required to have an approved maintenance/repair program for Government Property. The criteria in this program shall be used to determine when the contractor is required to request approval from the Contracting Officer for repair or replacement of Government property. However, in the absence of a Government approved maintenance/repair program, the Contractor must submit each repair request to the Contracting Officer. When the maintenance program requires the Contractor to inform the Contracting Officer of the need for a repair/replacement decision, the Contractor shall notify the Contracting Officer, in writing, and provide a "not to exceed" dollar amount for the repair of the property and a rationale as to why repair is the best alternative considering the age of the property, the nature of the defect(s), and the criticality of the property to the accomplishment of the requirements of the contract. If the Contracting Officer agrees that the property is still needed for contract performance and that repair is an acceptable alternative, the Contracting Officer may authorize the repair. If the Contracting Officer considers that repair is not an acceptable alternative, the Contracting Officer shall notify the Contractor and the replacement equipment or needed equivalent capability shall be provided by the Contractor in accordance with paragraph (b) above. This decision by the Contracting Officer shall not be subject to the Disputes clause of this contract.

(d) In the event that the Contractor is not selected in a subsequent recompetition of this requirement and the facility items replaced as contractor property are not needed for any other purpose, the Contractor is encouraged to offer to sell to the successor contractor any facility items that the successor contractor chooses to buy, at a fair and reasonable price.

(e) This clause shall not apply to the following items:

"Attachment C - Installation-Accountable Government Property"

(End of clause)

G. 6 PAYMENT OF FIXED FEE (1852.216-75) (DECEMBER 1988)

The fixed fee shall be paid in monthly installments based upon the percentage of completion of work as determined by the Contracting Officer.

(End of clause)

G. 7 SUBMISSION OF VOUCHERS FOR PAYMENT (18-52.216-87)(MAR 1998)

(a)The designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract is indicated below. Public vouchers for payment of costs shall include a reference to the number of this contract.

(b)(1) If the contractor is authorized to submit interim cost vouchers directly to the NASA paying office, the original voucher and one copy should be submitted to:

Cost and Commercial Accounts Department
Code 155
Goddard Space Flight Center
Greenbelt, Maryland 20771

(2) For any period that the Defense Contract Audit Agency has authorized the Contractor to submit interim cost vouchers directly to the Government paying office, interim vouchers are not required to be sent to the Auditor, and are considered to be provisionally approved for payment subject to final audit.

(3) Copies of vouchers should be submitted as may be directed by the Contracting Officer.

(c) If the contractor is not authorized to submit interim cost vouchers directly to the paying office as described in paragraph (b), the contractor shall prepare and submit vouchers as follows:

(1) One original and one copy Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment to the Auditor.

Defense Contract Audit Agency
Columbia Branch Office Mid-Atlantic Region
10025 Governor Warfield Parkway, Suite 200
Columbia, MD 21044-3329

(2) (Reserved)

(3) The Contracting Officer may designate other recipients as required.

(d) Public vouchers for payment of fee shall be prepared similarly to the procedures in paragraphs (b) or (c) of this clause, whichever is applicable, and be forwarded to the Contracting Officer.

This is the designated billing office for fee vouchers for purposes of the Prompt Payment clause of this contract.

(e) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.

(End of clause)

G. 8 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (1852.227-72) (JULY 1997)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights -- Retention by the Contractor (Short Form)", whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

Title	Office/Code	Address (including zip code)
New Technology Representative	504	Goddard Space Flight Center Greenbelt, MD 20771
Patent Representative	140.1	Goddard Space Flight Center Greenbelt, MD 20771

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquiries or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights--Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.305-370 of the NASA FAR Supplement.

(End of clause)

G. 9 TRAVEL OUTSIDE OF THE UNITED STATES (1852.242-71) (DEC 1988)

(a) The Contracting Officer must authorize in advance and in writing travel to locations outside of the United States by Contractor employees that is to be charged as a cost to this contract. This approval may be granted when the travel is necessary to the efforts required under the contract and it is otherwise in the best interest of NASA.

(b) The Contractor shall submit requests to the Contracting Officer at least 30 days in advance of the start of the travel.

(c) The Contractor shall submit a travel report at the conclusion of the travel. The Contracting Officer's approval of the travel will specify the required contents and distribution of the travel report.

(End of clause)

G. 10 NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING (1852.242-73) (NOV 2004)

(a) The Contractor shall submit NASA Contractor Financial Management Reports on NASA Forms 533 in accordance with the instructions in NASA Procedural Requirements (NPR) 9501.2, NASA Contractor Financial Management Reporting, and on the reverse side of the forms, as supplemented in the Schedule of this contract. The detailed reporting categories to be used, which shall correlate with technical and schedule reporting, shall be set forth in the Schedule. Contractor implementation of reporting requirements under this clause shall include NASA approval of the definitions of the content of each reporting category and give due regard to the Contractor's established financial management information system.

(b) Lower level detail used by the Contractor for its own management purposes to validate information provided to NASA shall be compatible with NASA requirements.

(c) Reports shall be submitted in the number of copies, at the time, and in the manner set forth in the Schedule or as designated in writing by the Contractor Officer. Upon completion and acceptance by NASA of all contract line items, the Contracting Officer may direct the Contractor to submit Form 533 reports on a quarterly basis only, report only when changes in actual cost incur, or suspend reporting altogether.

(d) The Contractor shall ensure that its Form 533 reports include accurate subcontractor cost data, in the proper reporting categories, for the reporting period.

(e) If during the performance of this contract NASA requires a change in the information or reporting requirements specified in the Schedule, or as provided for in paragraph (a) or (c) of this clause, the Contracting Officer shall effect that change in accordance with the Changes clause of this contract.

(End of clause)

G. 11 CONTRACTOR REQUESTS FOR GOVERNMENT-OWNED EQUIPMENT (1852.245-70) (JUL 1997)

(a) "Equipment," as used in this clause, means commercially available items capable of stand-alone use, including those to be acquired for incorporation into special test equipment or special tooling.

(b)(1) Upon determination of need for any Government-owned equipment item for performance of this contract, the contractor shall provide to the contracting officer a written request justifying the need for the equipment and the reasons why contractor-owned property cannot be used, citing the applicable FAR or contract authority for use of Government-owned equipment. Equipment being acquired as a deliverable end item listed in the contract or as a component for incorporation into a deliverable end item listed in the contract is exempt from this requirement.

(2) The contractor's request shall include a description of the item in sufficient detail to enable the Government to screen its inventories for available equipment or to purchase equipment. For this purpose, the contractor shall (i) prepare a separate DD Form 1419, DOD Industrial Plant Equipment

Requisition, or equivalent format, for each item requested and (ii) forward it through the contracting officer to the Industrial Property Officer at the cognizant NASA installation at least 30 days in advance of the date the contractor intends to acquire the item. Multiple units of identical items may be requested on a single form. Instructions for preparing the DD Form 1419 are contained in NASA FAR Supplement 1845.7102. If a certificate of non-availability is not received within that period, the contractor may proceed to acquire the item, subject to having obtained contracting officer consent, if required, and having complied with any other applicable provisions of this contract.

(c) Contractors who are authorized to conduct their own screening using the NASA Equipment Management System (NEMS) and other Government sources of excess property shall provide the evidence of screening results with their request for contracting officer consent. Requests to purchase based on unsuitability of items found shall include rationale for the determined unsuitability.

(End of clause)

G.12 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY (1852.245-71) (NOV 2004)

(a) The Government property described in the clause at 1852.245-77, List of Installation-Accountable Property and Services, shall be made available to the Contractor on a no-charge basis for use in performance of this contract. This property shall be utilized only within the physical confines of the NASA installation that provided the property. Under this clause, the Government retains accountability for, and title to, the property, and the contractor assumes the following user responsibilities:

(1) Notify the cognizant property custodian, COTR, and the Installation Security Officer immediately if theft of Government property is suspected or property cannot be located

(2) Identify Government property equipment that is no longer considered necessary for performance of the contract.

(3) Ensure that equipment is turned in to the Property Disposal Officer through the cognizant property custodian when no longer needed. This is the only acceptable procedure for disposal of Government property.

(4) Do not relocate Government property within Government premises or remove Government property from Government premises without written approval.

(5) Ensure that Government property, including property leased to the Government, is used only for the purposes of performing the contract.

(6) Ensure that Government property is protected and conserved.

The Contractor shall establish and adhere to a system of written procedures for compliance with the user responsibilities. Such procedures must include holding employees liable, when appropriate, for loss, damage, or destruction of Government property.

(b)(1) The official accountable record keeping, physical inventory, financial control, and reporting of the property subject to this clause shall be retained by the Government and accomplished by the installation Supply and Equipment Management Officer (SEMO) and Financial Management Officer. If this contract provides for the contractor to acquire property, title to which will vest in the Government, the following additional procedures apply:

(i) The contractor's purchase order shall require the vendor to deliver the property to the installation central receiving area;

(ii) The contractor shall furnish a copy of each purchase order, prior to delivery by the vendor, to the installation central receiving area;

(iii) The contractor shall establish a record of the property as required by FAR 45.5 and 1845.5 and furnish to the Industrial Property Officer a DD Form 1149 Requisition and Invoice/Shipping Document (or installation equivalent) to transfer accountability to the Government within 5 working days after receipt of the property by the contractor. The contractor is accountable for all contractor-acquired property until the property is transferred to the Government's accountability.

(iv) Contractor use of Government property at an off-site location and off-site subcontractor use require advance approval of the contracting officer and notification of the SEMO. The contractor shall assume accountability and financial reporting responsibility for such property. The contractor shall establish records and property control procedures and maintain the property in accordance with the requirements of FAR Part 45.5 until its return to the installation.

(2) After transfer of accountability to the Government, the contractor shall continue to maintain such internal records as are necessary to execute the user responsibilities identified in paragraph (a) and document the acquisition, billing, and disposition of the property. These records and supporting documentation shall be made available, upon request, to the SEMO and any other authorized representatives of the contracting officer.

(End of clause)

G.13 FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS (1852.245-73) (OCT 2003)

(a) The Contractor shall submit annually a NASA Form (NF) 1018, NASA Property in the Custody of Contractors, in accordance with the provisions of 1845.505-14, the instructions on the form, subpart 1845.71, and any supplemental instructions for the current reporting period issued by NASA.

(b) (1) Subcontractor use of NF 1018 is not required by this clause; however, the Contractor shall include data on property in the possession of subcontractors in the annual NF 1018.

(2) The Contractor shall mail the original signed NF 1018 directly to the Goddard Space Flight Center (GSFC), General Accounting Department, Property and Reporting Team, Code 157, Greenbelt, MD 20771, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(3) One copy shall be submitted (through the Department of Defense (DOD) Property Administrator if contract administration has been delegated to DOD) to the following address:

Goddard Space Flight Center, Property Management Branch, Code 235, Greenbelt, MD 20771--unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(c) (1) The annual reporting period shall be from October 1 of each year through September 30 of the following year. The report shall be submitted in time to be received by October 15. The information

contained in these reports is entered into the NASA accounting system to reflect current asset values for agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 15. Some activity may be estimated for the month of September, if necessary, to ensure the NF 1018 is received when due. However, contractors' procedures must document the process for developing these estimates based on planned activity such as planned purchases or NASA Form 533 (NF 533 Contractor Financial Management Report) cost estimates. It should be supported and documented by historical experience or other corroborating evidence, and be retained in accordance with FAR Subpart 4.7, Contractor Records Retention. Contractors shall validate the reasonableness of the estimates and associated methodology by comparing them to actual activity once that data is available, and adjust them accordingly. In addition, differences between the estimated cost and the actual cost must be adjusted during the reporting period. Contractors shall have formal policies and procedures, which address the validation of NF 1018 data, including data from subcontractors, and the identification and timely reporting of errors. The objective of this validation is to ensure that information reported is accurate and in compliance with the NASA FAR Supplement. If errors are discovered on NF 1018 after submission, the contractor shall immediately contact the cognizant NASA Center Industrial Property Officer (IPO) to discuss corrective action.

(2) The Contracting Officer may, in NASA's interest, withhold payment until a reserve not exceeding $25,000 or 5 percent of the amount of the contract, whichever is less, has been set aside, if the Contractor fails to submit annual NF 1018 reports in accordance with 1845.505-14 and any supplemental instructions for the current reporting period issued by NASA. Such reserve shall be withheld until the Contracting Officer has determined that NASA has received the required reports. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(d) A final report shall be submitted within 30 days after disposition of all property subject to reporting when the contract performance period is complete in accordance with (b)(1) through (3) of this clause.

(End of clause)

G.14 LIST OF GOVERNMENT-FURNISHED PROPERTY (1852.245-76) (OCT 1988)

For performance of work under this contract, the Government will make available Government property identified below or in Attachment "not applicable" of this contract on a no-charge-for-use basis. The Contractor shall use this property in the performance of this contract at [TBD] and at other location(s) as may be approved by the Contracting Officer. Under the FAR 52.245 Government property clause of this contract, the Contractor is accountable for the identified property.

Item	Quantity	Acquisition Cost	Date to be Furnished to the Contractor

NONE

(End of clause)

G.15 LIST OF INSTALLATION-ACCOUNTABLE PROPERTY AND SERVICES (1852.245-77) (JUL 1997)

In accordance with the clause at 1852.245-71, Installation-Accountable Government Property, the Contractor is authorized use of the types of property and services listed below, to the extent they are available, in the performance of this contract within the physical borders of the installation which may include buildings and space owned or directly leased by NASA in close proximity to the installation, if so designated by the Contracting Officer.

(a) Office space, work area space, and utilities. Government telephones are available for official purposes only; pay telephones are available for contractor employees for unofficial calls.

(b) General- and special-purpose equipment, including office furniture.

(1) Equipment to be made available is listed in Attachment C. The Government retains accountability for this property under the clause at 1852.245-71, Installation-Accountable Government Property, regardless of its authorized location.

(2) If the Contractor acquires property, title to which vests in the Government pursuant to other provisions of this contract, this property also shall become accountable to the Government upon its entry into Government records as required by the clause at 1852.245-71, Installation-Accountable Government Property.

(3) The Contractor shall not bring to the installation for use under this contract any property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, without the Contracting Officer's prior written approval.

(c) Supplies from stores stock.

(d) Publications and blank forms stocked by the installation.

(e) Safety and fire protection for Contractor personnel and facilities.

(f) Installation service facilities: None

(g) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.

(h) Cafeteria privileges for Contractor employees during normal operating hours.

(i) Building maintenance for facilities occupied by Contractor personnel.

(j) Moving and hauling for office moves, movement of large equipment, and delivery of supplies. Moving services shall be provided on-site, as approved by the Contracting Officer.

(k) The user responsibilities of the Contractor are defined in paragraph (a) of the clause at 1852.245-71, Installation-Accountable Government Property.

(End of clause)

SECTION H OF NNG07HW03C
SPECIAL CONTRACT REQUIREMENTS

H. 1 SECTION H CLAUSES INCORPORATED BY REFERENCE

(1852.208-81)	RESTRICTIONS ON PRINTING AND DUPLICATING (NOV 2004)
(1852.223-70)	SAFETY AND HEALTH (APR 2002)
(1852.223-75)	MAJOR BREACH OF SAFETY OR SECURITY (FEB 2002)
(1852.242-72)	OBSERVANCE OF LEGAL HOLIDAYS (AUG 1992)--ALTERNATE II (OCT 2000)
(1852.244-70)	GEOGRAPHIC PARTICIPATION IN THE AEROSPACE PROGRAM (APRIL 1985)

(End of By Reference Section)

H. 2 ONSITE CONTRACTOR PERSONNEL—IDENTIFICATION, REPORTING, AND CHECKOUT PROCEDURES (GSFC 52.204-99) (AUG 2003)

(a) The Contractor shall designate a representative (point of contact) for the purposes of this clause. The Contractor shall notify the GSFC Security Division, Code 240, Attention: Locator and Information Tracking System (LISTS) Manager, and the Contracting Officer's Technical Representative (COTR) of the designated representative within 15 calendar days of award of this contract. The GSFC maintained LISTS contains work and home location and contact information for personnel that have permanent NASA/GSFC identification badges. The Contractor may contact the LISTS Manager, Tel 301-286-2306 for assistance regarding LISTS.

(b) The Contractor must apply for permanent NASA/GSFC identification badges for those employees who will be employed by the contractor onsite for at least six months. The GSFC Security Division will consider permanent identification badges for other employees of the Contractor on a case by case basis, such as employees that are not resident onsite, but must frequently visit. For each employee, the Contractor must complete and submit a GSFC Form 24-27, "LISTS Form", and a NASA Form 531, "Name Check Request". The forms are available from GSFC Stores Stock or online via NASA and GSFC systems. The GSFC Form 24-27 must be signed by the COTR or the Contracting Officer. The COTR will resolve any housing or access issues, review the forms for accuracy and completeness, and return the signed forms to the Contractor. The Contractor shall forward the form(s) to the GSFC Security Division, Code 240, for the necessary checks, issuance of identification badges, and subsequent data entry into the LISTS. Arrangements for fingerprinting employees will be handled by representatives of the GSFC Security Division's ID Section.

(c) The Contractor shall submit an annotated LISTS Report each month. The GSFC LISTS Manager will furnish a LISTS print-out to the Contractor no later than the end of each month. The Contractor shall annotate this provided report to correct and update the information as follows:

(1) Draw a line through the names of employees who are no longer employed by the contractor or that no longer work onsite under the contract, and;

(2) Make handwritten changes to any other incorrect data.

The annotated LISTS Report shall be separately submitted to the GSFC Security Division, Code 240, Attention: LISTS Manager, and to the COTR by the 10th calendar day of the month.
(d) The Contractor shall ensure that all personnel who have NASA/GSFC issued identification, keys or other property who leave its employ or that no longer work onsite, process out through the GSFC Security Division, Code 240. Employees must return all GSFC issued identification and any Government property no later than the last day of their employment. The Contractor shall establish appropriate procedures and controls to ensure this is accomplished. Failure to comply may result in the exercise of Government rights to limit and control access to Government premises, including denial of access and invalidation of NASA issued badges and identification.

(End of clause)

H. 3 GOVERNMENT PREMISES—PHYSICAL ACCESS AND COMPLIANCE WITH PROCEDURES (GSFC 52.211-95) (JUN 2006)

(a) (1) The Contractor must apply for permanent NASA/GSFC Identification Badges for those employees that will be employed by the Contractor and that will be resident for at least six months at GSFC or at locations controlled by GSFC, such as GSFC leased space. Other personnel may be issued a temporary badge. All personnel must conspicuously display the GSFC badge at, or above, the waistline. Refer to GSFC clause 52.204-99, "Onsite Contractor Personnel—Identification, Reporting, and Checkout Procedures" for permanent Identification Badge issuance procedures.

(2) Visits by foreign nationals are restricted and must be necessary for the performance of the contract and concurred with by the Contracting Officer or by the Contracting Officer's Technical Representative. Approval of such visits must be approved in advance in accordance with GPR 1600.1.

(3) Access to the GSFC may be changed or adjusted in response to threat conditions or special situations.

(b) While on Government premises, the Contractor shall comply with requirements governing the conduct of personnel and the operation of the facility. These requirements are set forth in NASA-wide or installation directives, procedures, handbooks and announcements. The following cover many of the requirements:

(1) Coordinated Harassment/Discrimination Inquiry Guidelines
<http://internal.gsfc.nasa.gov/directives/security.html>
(2) GMI 1152.9, Facilities Coordination Committee
(3) GPR 1600.1, GSFC Security Manual
(4) GPR 1700.1, Occupational Safety Program
(5) GPR 1700.2, Chemical Hygiene Plan
(6) GPR 1800.1, GSFC Smoking Guidelines
(7) GPR 1800.2, Occupational Health Program
(8) GPR 1860.1, Ionizing Radiation Protection
(9) GPR 1860.2, Laser Radiation Protection
(10) GPR 1860.3, Radio Frequency Radiation Safety
(11) GPR 1860.4, Ultraviolet and High Intensity Light Radiation Protection
(12) GPR 2570.1, Radio Frequency Equipment Licensing

(13) GPD 8500.1, Environmental Program Management
(14) GPR 8710.2, Emergency Preparedness Program for Greenbelt
(15) GPD 8715.1, GSFC Safety Policy
(16) GPR 8715.1, Processing of NASA Safety Reporting System (NSRS) Incident Reports

Copies of the current issuances may be obtained at <http://gdms.gsfc.nasa.gov> or from the Contracting Officer. The above list may be modified by the Contracting Officer to include additional issuances pertaining to the conduct of personnel and the operation of the facility.

(c) The Contractor may not use official Government mail (indicia or "eagle" mail). Contractors found in violation could be liable for a fine of $300 per piece of indicia mail used. However, the Contractor is allowed to use internal GSFC mail to the extent necessary for purposes of the contract.

(End of clause)

H. 4 REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFEROR (GSFC 52.215-90) (NOV 1999)

In accordance with FAR 15.204-1(b), the completed and submitted "Representations, Certifications, and Other Statements of Offeror", are incorporated by reference in this resulting contract.

(End of clause)

H. 5 SAFETY AND HEALTH--ADDITIONAL REQUIREMENTS (GSFC 52.223-91) (NOV 2005)

(a) Other safety and health requirements. In addition to compliance with all Federal, state, and local laws as required by paragraph (d) of NFS clause 18-52.223-70, the Contractor shall comply with the following:

Quarterly health and safety report specifying incidents, disabling injuries, lost work days incident rate, days lost, property damage cost, man-hours worked/month, and total employees. Template available at http://safety1st.gsfc.nasa.gov under Contractor Safety.

(b) Reporting. The immediate notification and prompt reporting required by paragraph (d) of NFS clause 1852.223-70 shall be to the Goddard Space Flight Center Safety and Environmental Division, Code 250, Tel 301-286-6296 and to the Contracting Officer. This should be a verbal notification and confirmed by FAX or E-Mail. This notification is also required for any unsafe or environmentally hazardous condition associated with Government-owned property that is provided or made available for the performance of the contract.

(End of clause)

H. 6 GOVERNMENT PROPERTY--COMPLIANCE WITH SAFETY STANDARDS (GSFC 52.223-92) (JUL 2006)

This contract involves the use of Government-furnished property or installation provided property. If any of the property does not conform to applicable Federal, state, or local safety standards, the Contractor shall promptly notify the Contracting Officer in writing (with a copy to the GSFC Safety Officer, Code 250).

(End of clause)

H. 7 TASK ORDERING PROCEDURE (1852.216-80) (OCTOBER 1996)

(a) Only the Contracting Officer may issue task orders to the Contractor, providing specific authorization or direction to perform work within the scope of the contract and as specified in the schedule. The Contractor may incur costs under this contract in performance of task orders and task order modifications issued in accordance with this clause. No other costs are authorized unless otherwise specified in the contract or expressly authorized by the Contracting Officer.

(b) Prior to issuing a task order, the Contracting Officer shall provide the Contractor with the following data:

(1) A functional description of the work identifying the objectives or results desired from the contemplated task order.

(2) Proposed performance standards to be used as criteria for determining whether the work requirements have been met.

(3) A request for a task plan from the Contractor to include the technical approach, period of performance, appropriate cost information, and any other information required to determine the reasonableness of the Contractor's proposal.

(c) Within 5-15 calendar days after receipt of the Contracting Officer's request, the Contractor shall submit a task plan conforming to the request.

(d) After review and any necessary discussions, the Contracting Officer may issue a task order to the Contractor containing, as a minimum, the following:

(1) Date of the order.

(2) Contract number and order number.

(3) Functional description of the work identifying the objectives or results desired from the task order, including special instructions or other information necessary for performance of the task.

(4) Performance standards, and where appropriate, quality assurance standards.

(5) Maximum dollar amount authorized (cost and fee or price). This includes allocation of fixed fee.

(6) Any other resources (travel, materials, equipment, facilities, etc.) authorized.

(7) Delivery/performance schedule including start and end dates.

(8) If contract funding is by individual task order, accounting and appropriation data.

(e) The Contractor shall provide acknowledgment of receipt to the Contracting Officer within 3 calendar days after receipt of the task order.

(f) If time constraints do not permit issuance of a fully defined task order in accordance with the procedures described in paragraphs (a) through (d), a task order which includes a ceiling price may be issued.

(g) The Contracting Officer may amend tasks in the same manner in which they were issued.

(h) In the event of a conflict between the requirements of the task order and the Contractor's approved task plan, the task order shall prevail.

(End of clause)

H. 8 EXPORT LICENSES (1852.225-70) (FEB 2000)

(a) The Contractor shall comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance.

(b) The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any Government installation, where the foreign person will have access to export-controlled technical data or software.

(c) The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.

(d) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.

(End of clause)

H.9 EARTH SCIENCES PROCUREMENT LIBRARY

The offeror acknowledges that it is in the interest of NASA to foster competitive acquisition of any follow-on contract for this scope of work. Accordingly, the Contractor agrees to cooperate with the Contracting Officer to maintain an ongoing and current Earth Sciences Procurement Library. This library shall be available during normal working hours to any interested Contractor. Further, the Contractor agrees to provide any reports or other deliverable items in a form that can be displayed in the library and made fully available to any other Contractor. However, this requirement shall not be construed to require the Contractor to reveal any company sensitive or proprietary materials or information.

(End of Text)

H.10 RELEASE OF SENSITIVE INFORMATION (1852.237-73) (JUNE 2005)

(a) As used in this clause, "sensitive information" refers to information, not currently in the public domain, that the Contractor has developed at private expense, that may embody trade secrets or commercial or financial information, and that may be sensitive or privileged.

(b) In accomplishing management activities and administrative functions, NASA relies heavily on the support of various service providers. To support NASA activities and functions, these service providers, as well as their subcontractors and their individual employees, may need access to sensitive information submitted by the Contractor under this contract. By submitting this proposal or performing this contract, the Contractor agrees that NASA may release to its service providers, their subcontractors, and their individual employees, sensitive information submitted during the course of this procurement, subject to the enumerated protections mandated by the clause at 1852.237-72, Access to Sensitive Information.

(c)(1) The Contractor shall identify any sensitive information submitted in support of this proposal or in performing this contract. For purposes of identifying sensitive information, the Contractor may, in addition to any other notice or legend otherwise required, use a notice similar to the following:

Mark the title page with the following legend:

This proposal or document includes sensitive information that NASA shall not disclose outside the Agency and its service providers that support management activities and administrative functions. To gain access to this sensitive information, a service provider's contract must contain the clause at NFS 1852.237-72, Access to Sensitive Information. Consistent with this clause, the service provider shall not duplicate, use, or disclose the information in whole or in part for any purpose other than to perform the services specified in its contract. This restriction does not limit the Government's right to use this information if it is obtained from another source without restriction. The information subject to this restriction is contained in pages [insert page numbers or other identification of pages].

Mark each page of sensitive information the Contractor wishes to restrict with the following legend:

Use or disclosure of sensitive information contained on this page is subject to the restriction on the title page of this proposal or document.

(2) The Contracting Officer shall evaluate the facts supporting any claim that particular information is "sensitive." This evaluation shall consider the time and resources necessary to protect the information in accordance with the detailed safeguards mandated by the clause at 1852.237-72, Access to Sensitive Information. However, unless the Contracting Officer decides, with the advice of Center counsel, that reasonable grounds exist to challenge the Contractor's claim that particular information is sensitive, NASA and its service providers and their employees shall comply with all of the safeguards contained in paragraph (d) of this clause.

(d) To receive access to sensitive information needed to assist NASA in accomplishing management activities and administrative functions, the service provider must be operating under a contract that

contains the clause at 1852.237-72, Access to Sensitive Information. This clause obligates the service provider to do the following:

(1) Comply with all specified procedures and obligations, including the Organizational Conflicts of Interest Avoidance Plan, which the contract has incorporated as a compliance document.

(2) Utilize any sensitive information coming into its possession only for the purpose of performing the services specified in its contract.

(3) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.

(4) Allow access to sensitive information only to those employees that need it to perform services under its contract.

(5) Preclude access and disclosure of sensitive information to persons and entities outside of the service provider's organization.

(6) Train employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in its contract and to safeguard it from unauthorized use and disclosure.

(7) Obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.

(8) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the Contracting Officer, and implement any necessary corrective actions.

(e) When the service provider will have primary responsibility for operating an information technology system for NASA that contains sensitive information, the service provider's contract shall include the clause at 1852.204-76, Security Requirements for Unclassified Information Technology Resources. The Security Requirements clause requires the service provider to implement an Information Technology Security Plan to protect information processed, stored, or transmitted from unauthorized access, alteration, disclosure, or use. Service provider personnel requiring privileged access or limited privileged access to these information technology systems are subject to screening using the standard National Agency Check (NAC) forms appropriate to the level of risk for adverse impact to NASA missions. The Contracting Officer may allow the service provider to conduct its own screening, provided the service provider employs substantially equivalent screening procedures.

(f) This clause does not affect NASA's responsibilities under the Freedom of Information Act.

(g) The Contractor shall insert this clause, including this paragraph (g), suitably modified to reflect the relationship of the parties, in all subcontracts that may require the furnishing of sensitive information.

(End of clause)

SECTION I OF NNG07HW03C
CONTRACT CLAUSES

I. 1 SECTION I CLAUSES INCORPORATED BY REFERENCE

(52.202-1)	DEFINITIONS (JULY 2004)
(52.203-3)	GRATUITIES (APR 1984)
(52.203-5)	COVENANT AGAINST CONTINGENT FEES (APR 1984)
(52.203-6)	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (SEPT 2006)
(52.203-7)	ANTI-KICKBACK PROCEDURES (JUL 1995)
(52.203-8)	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)
(52.203-10)	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)
(52.203-12)	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEPT 2005)
(52.204-4)	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)
(52.204-7)	CENTRAL CONTRACTOR REGISTRATION (JULY 2006)
(52.209-6)	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (SEPT 2006)
(52.211-15)	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS (SEPT 1990)
(52.215-2)	AUDIT AND RECORDS--NEGOTIATION (JUN 1999)
(52.215-8)	ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT (OCT 1997)
(52.215-11)	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATION (OCT 1997)
(52.215-13)	SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS (OCT 1997)
(52.215-15)	PENSION ADJUSTMENTS AND ASSET REVERSIONS (OCT 2004)
(52.215-18)	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS (JUL 2005)
(52.215-19)	NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997)
(52.215-21)	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS (OCT 1997)
(52.216-7)	ALLOWABLE COST AND PAYMENT (DEC 2002)
(52.219-6)	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUNE 2003)
(52.219-8)	UTILIZATION OF SMALL BUSINESS CONCERNS (MAY 2004)
(52.222-1)	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)
(52.222-20)	WALSH-HEALEY PUBLIC CONTRACTS ACT (DEC 1996)
(52.222-21)	PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)
(52.222-26)	EQUAL OPPORTUNITY (APR 2002)
(52.222-35)	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER DISABLED VETERANS (SEPT 2006)
(52.222-36)	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)

SECTION I OF NNG07HW03C
CONTRACT CLAUSES

(52.222-37)	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEPT 2006)
(52.223-5)	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (AUG 2003)
(52.223-6)	DRUG FREE WORK PLACE (MAY 2001)
(52.223-14)	TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)
(52.225-13)	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (FEB 2006)
(52.227-1)	AUTHORIZATION AND CONSENT (JUL 1995)--ALTERNATE I (APR 1984)
(52.227-2)	NOTICE AND ASSISTANCE REGARDING PATENT AND COPY-RIGHT INFRINGEMENT (AUG 1996)
(52.227-11)	PATENT RIGHTS--RETENTION BY CONTRACTOR (SHORT FORM) (JUN 1997) as modified by NASA FAR Supplement 1852.227-11
(52.227-14)	RIGHTS IN DATA-GENERAL (JUN 1987) as modified by NASA FAR Supplement 1852.227-14 (OCT 1995)
(52.227-16)	ADDITIONAL DATA REQUIREMENTS (JUN 1987)
(52.228-7)	INSURANCE--LIABILITY TO THIRD PERSONS (MAR 1996)
(52.232-17)	INTEREST (JUN 1996)
(52.232-22)	LIMITATION OF FUNDS (APR 1984)
(52.232-23)	ASSIGNMENT OF CLAIMS (JAN 1986)
(52.232-25)	PROMPT PAYMENT (OCT 2003)--ALTERNATE I (FEB 2002)
(52.232-34)	PAYMENT BY ELECTRONIC FUNDS TRANSFER--OTHER THAN CENTRAL CONTRACTOR REGISTRATION (MAY 1999)[para (b)(1) fill-in (hereafter: "designated office"--Cost and Commercial Accounts Department, Code 155, NASA/Goddard Space Flight Center, Greenbelt, MD 20771, FAX 301-286-1748, no later than concurrent with the first request for payment.]
(52.233-1)	DISPUTES (JULY 2002)
(52.233-3)	PROTEST AFTER AWARD (AUG 1996)--ALTERNATE I (JUN 1985)
(52.233-4)	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)
(52.237-2)	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT AND VEGETATION (APR 1984)
(52.237-3)	CONTINUITY OF SERVICES (JAN 1991)
(52.242-1)	NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)
(52.242-3)	PENALTIES FOR UNALLOWABLE COSTS (MAY 2001)
(52.242-4)	CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997)
(52.242-13)	BANKRUPTCY (JUL 1995)
(52.243-2)	CHANGES--COST-REIMBURSEMENT (AUG 1987)--ALTERNATE I (APR 1984)
(52.244-2)	SUBCONTRACTS (AUG 1988)--ALTERNATE I (JAN 2006) {paragraph (e) is "Professional and consultant costs as defined at FAR 31.205-33" and paragraph (k) is "**TBD**"}
(52.244-5)	COMPETITION IN SUBCONTRACTING (DEC 1996)
(52.245-5)	GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL, OR LABOR-HOUR CONTRACTS)(MAY 2004) (DEVIATION) (SEP 1999)--(g)(5) of the clause shall read as follows: "The contractor shall

	notify the contracting officer upon loss or destruction of, or damage to, Government property provided under this contract, with the exception of low value property for which loss, damage, or destruction is reported at contract termination, completion, or when needed for continued performance. The Contractor shall take all reasonable action to protect the Government property from further damage, separate the damaged and undamaged Government property, put all the affected Government property in the best possible order, and furnish to the Contracting Officer a statement of--" The balance of (g)(5) is unchanged.
(52.245-19)	GOVERNMENT PROPERTY FURNISHED "AS IS" (APR 1984)
(52.246-25)	LIMITATION OF LIABILITY--SERVICES (FEB 1997)
(52.247-1)	COMMERCIAL BILL OF LADING NOTATIONS (FEB 2006)
(52.247-63)	PREFERENCE FOR U.S.-FLAG AIR CARRIERS (JUNE 2003)
(52.247-67)	SUBMISSION OF COMMERCIAL TRANPORTATION BILLS TO THE GENERAL SERVICES ADMINISTRATION FOR AUDIT (FEB 2006)
(52.249-6)	TERMINATION (COST-REIMBURSEMENT) (MAY 2004)
(52.249-14)	EXCUSABLE DELAYS (APR 1984)
(1852.204-76)	SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (NOV 2004) Para (c) is completed with "30 days"
(1852.215-84)	OMBUDSMAN (OCT 2003)--ALTERNATE I (JUNE 2000) The installation Ombudsman is Dorothy C. Perkins, Goddard Space Flight Center, Mailstop 100, Greenbelt, MD 20771, Business Phone: 301 286-5066, Fax 301 286-1714, E-mail address: Dorothy C. Perkins@nasa.gov
(1852.216-89)	ASSIGNMENT AND RELEASE FORMS (JUL 1997)
(1852.237-72)	ACCESS TO SENSITIVE INFORMATION
(1852.243-71)	SHARED SAVINGS (MAR 1997)

(End of By Reference Section)

I. 2 LIMITATIONS ON SUBCONTRACTING (52.219-14) (DEC 1996)

(a) This clause does not apply to the unrestricted portion of a partial set-aside.

(b) By submission of an offer and execution of a contract, the Offeror/Contractor agrees that in performance of the contract in the case of a contract for--

(1) Services (except construction). At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees for the concern.

(2) Supplies (other than procurement from a nonmanufacturer of such supplies). The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.

(3) General construction. The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.

(4) Construction by special trade contractors. The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.

(End of clause)

I. 3 NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES (52.222-39) (Dec 2004)

(a) *Definition*. As used in this clause-"United States" means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) Except as provided in paragraph (e) of this clause, during the term of this contract, the Contractor shall post a notice, in the form of a poster, informing employees of their rights concerning union membership and payment of union dues and fees, in conspicuous places in and about all its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the information pertaining to National Labor Relations Board shall not be included in notices posted in the plants or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188)).

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs. Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you do not want to pay that portion of dues or fees used to support activities not related to collective bargaining, contract administration, or grievance adjustment, you are entitled to an appropriate reduction in your payment. If you believe that you have been required to pay dues or fees used in part to support activities not related to collective bargaining, contract administration, or grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact the National Labor Relations Board (NLRB) either at one of its Regional offices or at the following address or toll free number:

National Labor Relations Board
Division of Information
1099 14th Street, N.W.
Washington, D.C. 20570
1-866-667-6572
1-866-316-6572 (TTY)

To locate the nearest NLRB office, see NLRB's website at *http://www.nlrb.gov*.

(c) The Contractor shall comply with all provisions of Executive Order 13201 of February 17, 2001, and related implementing regulations at 29 CFR part 470, and orders of the Secretary of Labor.

(d) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (b), (c), or (g), the Secretary may direct that this contract be cancelled, terminated, or suspended in whole or in part, and declare the Contractor ineligible for further Government contracts in accordance with procedures at 29 CFR part 470, Subpart B-Compliance Evaluations, Complaint Investigations and Enforcement Procedures. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 470, which implements Executive Order 13201, or as are otherwise provided by law.

(e) The requirement to post the employee notice in paragraph (b) does not apply to-

(1) Contractors and subcontractors that employ fewer than 15 persons;

(2) Contractor establishments or construction work sites where no union has been formally recognized by the Contractor or certified as the exclusive bargaining representative of the Contractor's employees;

(3) Contractor establishments or construction work sites located in a jurisdiction named in the definition of the United States in which the law of that jurisdiction forbids enforcement of union-security agreements;

(4) Contractor facilities where upon the written request of the Contractor, the Department of Labor Deputy Assistant Secretary for Labor-Management Programs has waived the posting requirements with respect to any of the Contractor's facilities if the Deputy Assistant Secretary finds that the Contractor has demonstrated that-

(i) The facility is in all respects separate and distinct from activities of the Contractor related to the performance of a contract; and

(ii) Such a waiver will not interfere with or impede the effectuation of the Executive order; or

(5) Work outside the United States that does not involve the recruitment or employment of workers within the United States.

(f) The Department of Labor publishes the official employee notice in two variations; one for contractors covered by the Railway Labor Act and a second for all other contractors. The Contractor shall-

(1) Obtain the required employee notice poster from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-5605, Washington, DC 20210, or from any field office of the Department's Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Download a copy of the poster from the Office of Labor-Management Standards website at *http://www.olms.dol.gov*; or

(3) Reproduce and use exact duplicate copies of the Department of Labor's official poster.

(g) The Contractor shall include the substance of this clause in every subcontract or purchase order that exceeds the simplified acquisition threshold, entered into in connection with this contract, unless exempted by the Department of Labor Deputy Assistant Secretary for Labor-Management Programs on account of special circumstances in the national interest under authority of 29 CFR 470.3(c). For indefinite quantity subcontracts, the Contractor shall include the substance of this clause if the value of orders in any calendar year of the subcontract is expected to exceed the simplified acquisition threshold. Pursuant to 29 CFR part 470, Subpart B-Compliance Evaluations, Complaint Investigations and Enforcement Procedures, the Secretary of Labor may direct the Contractor to take such action in the enforcement of these regulations, including the imposition of sanctions for noncompliance with respect to any such subcontract or purchase order. If the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

(End of clause)

I. 4 LIMITATION ON WITHHOLDING OF PAYMENTS (52.232-9) (APR 1984)

If more than one clause or Schedule term of this contract authorizes the temporary withholding of amounts otherwise payable to the Contractor for supplies delivered or services performed, the total of the amounts withheld at any one time shall not exceed the greatest amount that may be withheld under any one clause or Schedule term at that time; provided, that this limitation shall not apply to--

(a) Withholdings pursuant to any clause relating to wages or hours of employees;

(b) Withholdings not specifically provided for by this contract;

(c) The recovery of overpayments; and

(d) Any other withholding for which the Contracting Officer determines that this limitation is inappropriate.

(End of clause)

I. 5 SUBCONTRACTS FOR COMMERCIAL ITEMS (52.244-6) (FEB 2006)

(a) *Definitions.* As used in this clause-

"Commercial item" has the meaning contained in Federal Acquisition Regulation 2.101, Definitions.

"Subcontract" includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c) (1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $500,000 ($1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (Apr 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Dec 2001) (38 U.S.C. 4212(a));

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (Dec 2004) (E.O. 13201). Flow down as required in accordance with paragraph (g) of FAR clause 52.222-39).

(vi) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) (46 U.S.C. App. 1241 and 10 U.S.C. 2631) (flow down required in accordance with paragraph (d) of FAR clause 52.247-64).

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

(End of clause)

I. 6 CLAUSES INCORPORATED BY REFERENCE (52.252-2) (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):
Federal Acquisition Regulation (FAR) clauses:

http://www.arnet.gov/far/
NASA FAR Supplement (NFS) clauses:

http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm

(End of clause)

I. 7 COMPUTER GENERATED FORMS (52.253-1) (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

(End of clause)

I. 8 USE OF RURAL AREA SMALL BUSINESSES (1852.219-74) (SEP 1990)

(a) Definitions.

"Rural area" means any county with a population of fewer than twenty thousand individuals.

"Small business concern," as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding under this contract, and qualified as a small business under the criteria and size standards in 13 CFR 121.

(b) NASA prime and subcontractors are encouraged to use their best efforts to award subcontracts to small business concerns located in rural areas.

(c) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as small business concerns located in rural areas.

(d) The Contractor agrees to insert the provisions of this clause, including this paragraph (d), in all subcontracts hereunder that offer subcontracting possibilities.

(End of clause)

I. 9 NASA 8 PERCENT GOAL (1852.219-76) (JUL 1997)

(a) Definitions.

"Historically Black Colleges or University", as used in this clause means an institution determined by the Secretary of Education to meet the requirements of 34 CFR Section 608.2. The term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

"Minority institutions", as used in this clause, means an institution of higher education meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)) which for the purposes of this clause includes a Hispanic-serving institution of higher education as defined in section 316(b)(1) of the Act (20 U.S.C. 1059c(b)(1)).

"Small disadvantaged business concern", as used in this clause, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR 124.
"Women-owned small business concern", as used in this clause, means a small business concern (1) which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women, and (2) whose management and daily business operations are controlled by one or more women.

(b) The NASA Administrator is required by statute to establish annually a goal to make available to small disadvantaged business concerns, Historically Black Colleges and Universities, minority institutions, and women-owned small business concerns, at least 8 percent of NASA's procurement dollars under prime contracts or subcontracts awarded in support of authorized programs, including the space station by the time operational status is obtained.

(c) The contractor hereby agrees to assist NASA in achieving this goal by using its best efforts to award subcontracts to such entities to the fullest extent consistent with efficient contract performance.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as small disadvantaged business concerns, Historically Black Colleges and Universities, minority institutions, and women-owned small business concerns.

(End of clause)

I.10 MINIMUM INSURANCE COVERAGE (1852.228-75) (OCT 1988)

The Contractor shall obtain and maintain insurance coverage as follows for the performance of this contract:

(a) Worker's compensation and employer's liability insurance as required by applicable Federal and state workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with the Contractor's commercial operations that it would not be practical. The employer's liability coverage shall be at least $100,000, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

(b) Comprehensive general (bodily injury) liability insurance of at least $500,000 per occurrence.

(c) Motor vehicle liability insurance written on the comprehensive form of policy, which provides for bodily injury and property damage liability covering the operation of all motor vehicles used in connection with performing the contract. Policies covering motor vehicles operated in the United States shall provide coverage of at least $200,000 per person and $500,000 per occurrence for bodily injury liability and $20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

(d) Comprehensive general and motor vehicle liability policies shall contain a provision worded as follows:

"The insurance company waives any right of subrogation against the United States of America which may arise by reason of any payment under the policy."

(e) When aircraft are used in connection with performing the contract, aircraft public and passenger liability insurance of at least $200,000 per person and $500,000 per occurrence for bodily injury, other than passenger liability, and $200,000 per occurrence for property damage. Coverage for passenger liability bodily injury shall be at least $200,000 multiplied by the number of seats or passengers, whichever is greater.

(End of clause)

I.11 CENTER FOR AEROSPACE INFORMATION (1852.235-70) (FEB 2003)

(a) The Contractor should register with and avail itself of the services provided by the NASA Center for AeroSpace Information (CASI) (http://www.sti.nasa.gov) for the conduct of research or research and development required under this contract. CASI provides a variety of services and products as a NASA repository and database of research information, which may enhance contract performance.

(b) Should the CASI information or service requested by the Contractor be unavailable or not in the exact form necessary by the Contractor, neither CASI nor NASA is obligated to search for or change the

format of the information. A failure to furnish information shall not entitle the Contractor to an equitable adjustment under the terms and conditions of this contract.

(c) Information regarding CASI and the services available can be obtained at the Internet address contained in paragraph (a) of this clause or at the following address:

Center for AeroSpace Information (CASI)
7121 Standard Drive
Hanover, Maryland 21076-1320
Email: help@sti.nasa.gov
Phone: 301-621-0390
FAX: 301-621-0134

(End of clause)

I.12 EMERGENCY EVACUATION PROCEDURES (1852.237-70) (DEC 1988)

The Contractor shall assure that its personnel at Government facilities are familiar with the functions of the Government's emergency evacuation procedures. If requested by the Contracting Officer, the Contractor shall designate an individual or individuals as contact points to provide for efficient and rapid evacuation of the facility if and when required.

(End of clause)

J. 1 LIST OF ATTACHMENTS (GSFC 52.211-101) (OCT 1988)

The following attachments constitute part of this contract:

Attachment	Description	Date	No. of Pages
A	Statement of Work	12/21/05	9
B	Financial Management Reporting Requirements	12/21/05	2
C	List of Installation-Accountable Government Property	12/22/05	2
D	Safety and Health Plan	09/08/06	5
E	Direct and Indirect Rate Matrices	12/07/06	5
F	IT Security Plan	30 Days after contract award	TBP

(End of clause)

STATEMENT OF WORK

VERY LONG BASELINE INTERFEROMETRY
STATEMENT OF WORK

1.1 VLBI Support

Background:

VLBI (Very Long Baseline Interferometry) is one of several space geodetic techniques employed by NASA's Solid Earth and Interior focus area. The goal of the Earth Surface and Interior focus area is to assess, mitigate and forecast the natural hazards that affect society, including earthquakes, landslides, coastal and interior erosion, floods and volcanic eruptions. The primary VLBI activities are to generate data to integrate all effects related to the Earth's moment of inertia, angular momentum, and orientation in space, to support the precise reference frames needed for Earth and space sciences, and to advance the state of the art. VLBI measurements define the International Celestial Reference Frame and contribute to the International Terrestrial Reference Frame. The Goddard VLBI group is a focal point for the worldwide geodetic/astrometric VLBI community through the Coordinating Center of the IVS (International VLBI Service for Geodesy and Astrometry). The IVS is an international organization of agencies, institutions and groups cooperating in VLBI data acquisition, data processing, analysis and technical development. The functions of the IVS are distributed according to the interests and resources of the participating entities; Goddard functions as the IVS Coordinating Center, Network Coordinator, CORE Operation Center and one of the Analysis Centers. Similarly the Goddard VLBI group is responsible for development and maintenance of the data acquisition Field System used nearly universally.

The contractor shall provide the following:

1. Coordination of VLBI experiments including requesting and scheduling of observing and correlating resources, generation and distribution of observing schedules and procedures and retrieval of observing logs.
2. Developing, implementing, documenting, and maintaining NASA Goddard developed and provided Field System software (used at all 30 stations worldwide) and procedures associated with Mark III, Mark IV, VLBA, Mark 5, S2 and various K4/K5 data acquisition operations at field stations.
3. Implementation and maintenance of VLBI stations including logistical support, preparation of standard and custom software, travel, verification of readiness, training, trouble-shooting, and assistance in data acquisition.
4. Preparation of experiments for correlation and processing of correlator output into data bases suitable for geodetic/astrometric analysis.
5. Analysis and monitoring of station, correlator, and source performance.
6. Calibration and analysis of geodetic, astrometric, and special purpose VLBI sessions and other radio interferometric data.
7. Timely generation of VLBI results for Earth orientation, troposphere, celestial reference frame, and terrestrial reference frame.
8. Archiving, posting, and distribution of VLBI data and results.

9. Advancement of the VLBI technique in the areas of instrumentation, calibration, modeling, algorithms, analysis, optimization, simulation, comparisons, combinations, and ancillary data.
10. Design, development, testing, implementation, documentation and maintenance of software and data files for scheduling, data monitoring, data handling, calibration, modeling, simulation, analysis, report generation, visualization, archiving, data distribution, web site, and utility functions.
11. Comparison and integrated analysis of space geodetic data.
12. Development and maintenance of geodetic/astrometric capability of AIPS.
13. Support of IVS activities including the Coordinating Center, the Coordinating Center Director, the CORE Operation Center, the Network Coordinator, Analysis Center, publications, meetings, web site and communications.
14. Documentation of Mark III/IV VLBI systems.
15. Technical support services to various elements that support VLBI and IVS activities and operations.
16. Preparation of scientific and programmatic reports, presentations, and papers.
17. Support for the design, development, testing, evaluation, and deployment of the next generation geodetic VLBI station including instrumentation, scheduling, and control.

Technical Requirements

The contractor shall:

1. Coordinate VLBI experiments. These services include: maintaining the master multiagency observing schedule; coordinating station schedules, multiagency observing requirements, correlator schedules, and media usage; selecting sources and observing parameters; maintaining and updating scheduling data bases; monitoring sources for scheduling and astrometry: maintaining and updating the geodetic source list; preparing, archiving and distributing software, schedules, procedures and operation notes; and maintaining electronic mail, and computer network communications with cooperating facilities. The Contractor will prepare and submit proposals requesting observation time to those astronomical facilities that require them. The Contractor will continue the development of operational scheduling software and maintain and document that software. The Contractor will plan, schedule, execute and analyze special VLBI experiments needed to evaluate possible improvements in technique.

2. Develop, document and maintain Field System software and procedures associated with Mark III, Mark IV, VLBA, Mark 5, S2 and K4/K5 data acquisition operations at field stations. These services shall include developing software that controls VLBI equipment, checks and certifies proper equipment function before and during data acquisition, monitors data quality, displays status to operators, and logs changes in the system configuration. The Contractor shall also design, develop, implement and maintain the interfaces between the VLBI control computer and station computers which are required for pointing and other operations. The Contractor will develop and document procedures to be used by the station personnel for checkout of equipment, software, antenna pointing, and efficiency and system performance. The Contractor will test field software and procedures at VLBI stations and will be responsible for their proper operation

and maintenance. The Contractor will maintain the Field System computers at Goddard. The field software is to be applicable in all field configurations of the Mark III, Mark IV, VLBA, Mark 5, S2 and K4/K5 systems used by NASA and other agencies for fixed stations, transportable systems, and mobile units.

3. Provide the following services to support with implementation and maintenance of VLBI stations.

From Goddard these services shall include:
- coordinating activities
- logistics of shipping equipment and personnel travel
- preparing Field System computers
- preparing standard software and procedures for the site
- designing, implementing and testing site-specific software
- remote trouble-shooting
- traveling to the field site as needed

At station these services shall include:

- installation and testing of software
- integration of site-specific software and procedures
- verification of VLBI instrumentation readiness
- measurement and evaluation of station performance parameters including sensitivity and pointing
- training local staff in the use of software, procedures, and VLBI equipment
- establishing standard procedures for operation of VLBI equipment
- support with data acquisition sessions

After the initial installation and experiments, the Contractor will provide technical consultation with local site staff and act as liaison among VLBI support segments. The stations may include: Fortaleza, Brazil; Svetloe, Russia; Tsukuba, Japan; Ny Alesund, Norway; Seshan, China; Noto, Italy; Medicina, Italy; Yellowknife, Canada; Algonquin, Canada; Urumqi, China; Kashima, Japan; Yebes, Spain; Onsala, Sweden; Goddard Geophysical and Astronomical Observatory; Westford, Massachusetts; Gilmore Creek, Alaska; Kokee Park, Hawaii; Matera, Italy; Simeiz, Ukraine; Wettzell, Germany; Goldstone, California; Madrid, Spain; Tidbinbilla, Australia; Green Bank, West Virginia; Hobart, Australia; Zelenchukskaya, Russia; and Badary, Russia.

4. Prepare VLBI data for correlation and analysis. This includes receiving and distributing field logs, preparing experiments for correlation, and tracking correlator usage. The Contractor will obtain all NASA geodetic, astrometric, and specialized experiments from the responsible correlators and process the correlator output into calibrated data bases ready for initial analysis. This may include computing the VLBI observables, errors, and auxiliary data; creating the initial data base; inserting theoretical values, estimation quantities, and ancillary data; and inserting calibration and weather data. The Contractor will obtain VLBI data from other centers such as the U.S. Naval Observatory, the Geodetic Institute of Bonn University, the Federal Agency for Cartography and Geodesy, the Jet Propulsion Laboratory, the Communications Research

Laboratory and the Geographic Survey Institute or from IVS Data Centers and prepare the data for analysis or reanalysis as needed.

5. Monitor the performance of the observing schedules at the various stations and correlating facilities. This includes examining all data to maintain a history of station, correlator, and source behavior and to discover the causes of anomalous behavior. The Contractor will also design, develop, and maintain software for extracting, displaying and summarizing information from the VLBI data bases and the correlator output needed for characterizing station, correlator, source and overall equipment performance. The Contractor will maintain the files that summarize field performance, correlator efficiency, data quality, problems encountered, and other relevant information for each NASA and NEOS VLBI session.

6. Analyze NASA VLBI experiments and VLBI data from other centers.

7. Provide support for exporting data bases and creation of data products for placement on the Goddard VLBI web site, the IVS Data Centers and elsewhere as needed. This includes moving data bases to the proper export disk areas; creating and placing on export areas station cable and weather plots, SNR plots and summaries, analysis spool files, model plots, NGS files and SINEX files; generating weighting files and updating the standard weighting file; and generation of super files.

8. Prepare VLBI products for IVS use following the standards for timeliness and documentation. These may include Earth orientation parameters, source positions, station positions and velocities, SINEX files, and time series of station positions, baseline components, and source coordinates. The Contractor will transfer the required data, products and documentation to the appropriate IVS Data Center incoming area.

9. Archive VLBI field logs, data, solutions, and results.

10. Investigate methods for improving the VLBI technique. This work shall include such investigations as:

- phase calibration and other instrumentation;
- application of antenna holography;
- calibration of antenna deformations;
- astrometry at various frequencies;
- use of phase delay as the observable;
- comparisons and combinations of reference frames among VLBI, SLR and GPS techniques and among various VLBI analysis centers;
- improvements in data and results visualization;
- evaluation and investigation of geophysical models as they affect VLBI data;
- the effect of a cross-polarized signals on VLBI data;
- the effects of correlated errors on VLBI estimation;
- the effect of the neutral atmosphere on VLBI data, including the evaluation of different models of the dry and wet troposphere;
- development of improved algorithms for estimating the dry and wet troposphere from VLBI and ancillary data;

- application of improved models to existing and future VLBI data;
- strategies for determining site-dependent mapping functions by directly estimating them from VLBI data and by studying the elevation dependence of experiment residuals;
- the origin of observed periodic and aperiodic variations in baseline length and station positions and possible correlations with surface meteorological measurements, weather models, and hydrology;
- criteria for good VLBI performance;
- determining if the observed repeatability of VLBI measurements is correlated with meteorological parameters or with season;
- examining whether GPS data can be used to improve upon VLBI modeling of atmospheric delay as calibration or by combination;
- methods for evaluating the effect of the troposphere on VLBI observations using data from GPS, lidar, radiosonde, global weather models, and other sources;
- improvements in observing strategy including automatic and expert system scheduling, spatial and temporal distribution of observations, astrometric mode, and simulations;
- modeling of high frequency Earth orientation variations including generating diurnal and subdiurnal Earth orientation parameters from all relevant VLBI data, evaluating their formal and real uncertainties, studying their geophysical causes by investigating special characteristics and the relationship to ocean tides and circulation and comparing such Earth orientation parameters to similar results generated by other analysis centers and from other geodetic techniques and data sets;
- improving the geodetic results by expanding the geodetic source catalog for better observing geometry, by monitoring source flux, structure and position, by developing and implementing source structure corrections, and by establishing accurate ties between the quasar reference frame and those used in SLR, GPS, and conventional geodetic measurements;
- studying the systematic effects seen in VLBI data obtained from the VLBA correlator and the AIPS software;
- improving the efficiency of VLBI data analysis by revisions in estimation algorithms and data formats;
- modeling effects of day-to-day site motions on the accuracy and consistency Earth orientation parameters;
- characterizing source instability and selecting optimal sources for geodetic observing;
- optimization of station locations in a global geodetic network for reference frames and Earth orientation parameters;
- atmospheric, hydrological, and ocean loading;
- Gbit/sec, high SNR observing.

11. Design, develop, test, implement, document and maintain software and data files for all aspects of VLBI calibration, modeling, simulation, analysis, report generation, visualization, data and solution archiving, data handling, data distribution, web site display, and utility functions. This includes maintaining configuration control of the SOLVE/GLOBL analysis package and providing user guides and system manuals for interactive and batch processing. The Contractor will analyze VLBI data and make the necessary changes in the Mark III/IV data analysis system to test new methods and will be responsible for validating and documenting these changes. The

Contractor will develop and test VLBI capabilities in Geodyn and maintain the related data handling code.

12. Maintain a working and up-to-date copy of the AIPS program on one or more of the Goddard VLBI workstations and update it as new AIPS versions are released by NRAO. This includes maintaining and upgrading the AIPS programs CL2HF and HF2SV as necessary for geodetic/astrometric VLBI processing and submitting them to NRAO for inclusion in new releases of AIPS. The Contractor will maintain documentation for software and procedures.

13. Support IVS activities. The Contractor will support Goddard IVS functions including the Coordinating Center, the Network Coordinator, the CORE Operation Center, and the IVS Analysis Center at Goddard.

The Contractor will support the IVS Coordinating Center to coordinate both the day-to-day and the long-term activities of IVS, consistent with the directives and policies established by the IVS Directing Board. Working closely with the IVS Technology Coordinator, Network Coordinator, and Analysis Coordinator the Contractor will:

- coordinate and support the activities of the Network Stations, Operation Centers, Correlators, Data Centers, Analysis Centers, and Technology Development Centers,
- coordinate observing programs approved by the Directing Board,
- maintain the master schedule of observing sessions, coordinating the schedule with astronomical observing programs and with IVS networks,
- foster communications among all components of the IVS,
- define the best use of community resources,
- develop standards for IVS components,
- provide training in VLBI techniques,
- organize workshops and meetings, including an annual IVS general or technical meeting,
- produce and publish meeting proceedings and reports of activities of IVS components,
- maintain the IVS information system and archive all documents, standards, specifications, manuals, reports, and publications,
- maintain a Section 508 compliant web site for dissemination of IVS data, information and news,
- provide support with the IERS, IAG, IAU, IGS, ILRS, IDS and other organizations,
- provide the Secretariat of the IVS Directing Board.

Working closely with the geodetic and astronomical communities who are using the same network stations for observations, the Contractor will support the Network Coordinator to perform the following functions:

- monitor adherence to standards in the network operation,
- participate in the quality control of the data acquisition performance of the network stations,
- track data quality and data flow problems and suggest actions to improve the level of performance,

The Contractor will support the CORE Operation Center activities including:

- planning CORE network observing programs,
- establishing operating plans and procedures for the stations in the network,
- supporting the network stations in improving their performance,
- making correlator time available at an IVS Correlator,
- generating the detailed observing schedules for use in data acquisition sessions by the CORE network stations,
- posting the observing schedule to an IVS Data Center for distribution and to the Coordinating Center for archiving.

The Contractor will support the IVS Analysis Center at Goddard to produce the core IVS products without interruption at a specified time lag to meet IVS requirements. The IVS core products, at a minimum, consist of Earth orientation parameters, station coordinates, and source coordinates. The Contractor will place the final results in IVS Data Centers for dissemination to researchers and other users.

14. Provide library services for all documentation related to the Mark III/IV system. These services require the contractor to collect, organize, and maintain documentation for all aspects of the Mark III/IV system; including, but not limited to, manuals dealing with hardware, software, and operations. The Contractor shall maintain a system for archiving and updating these documents to keep them current and accessible. The Contractor will make Mark III/IV manuals and documents readily available to field sites and analysis centers, for use in experiment preparation, field site data acquisition, and data processing. This librarian function will support configuration control as well as commercial entities that are interested in replicating the government-designed hardware.

15. Provide technical support services to various elements supporting VLBI and IVS activities and operations, including staff at Goddard Space Flight Center, Haystack Observatory, Gilmore Creek Geophysical Observatory, Kokee Park Geophysical Observatory, and elsewhere and personnel at the US Naval Observatory, the National Radio Astronomy Observatory, and collaborating domestic and foreign institutions. These services shall include replying to questions about problems, providing information and advice, keeping colleagues informed via reports, and coordinating activities among institutions.

16. Analyze GPS data for crustal motions, the terrestrial reference frame, and Earth orientation parameters. The Contractor shall evaluate software packages, organize a system for data analysis, compare GPS results with those of VLBI and SLR, and analyze data acquired for NASA investigations and studies of the atmosphere at VLBI sites. The Contractor will develop and implement methods for combination of GPS and VLBI data types in a solution. The contractor will study the combination of space geodetic data from VLBI, SLR, GPS, and other techniques as well as geophysical information to improve the terrestrial reference frame, measurements of EOP, and crustal dynamic models.

17. Support and participate in the research activities of the Goddard VLBI group. This includes performing original research, preparing materials for reports and presentations, collaborating in

scientific papers, and supporting the documentation of research results and the subsequent activities associated with the presentation of results at scientific meetings and with publishing in refereed journal articles. The Contractor will participate in technical and programmatic meetings and provide support in critiquing the research of others working in related fields.

18. Support the design, development, testing, evaluation and deployment of the next generation geodetic VLBI station. This includes system studies, error modeling, simulations, schedule and network design, analysis of trade-offs, Field System upgrades, and system integration.

1.2 System Administration and Computer Operations Support

Background:

Provide system administration and computer operations support for the UNIX and Linux systems of the VLBI computing facility and for the Space Geodesy group. This shall include providing expertise and support in the following areas: operating systems, IT security, hardware, maintenance, user support, network connectivity, web presence, third-party software installation, creating customized systems utilities software, and performing software and data backups.

Technical Requirements

The contractor shall:

1. Provide system administration and computer operations support for the UNIX and Linux systems of the VLBI computing facility and for the Space Geodesy group. This shall include routine maintenance, operating system upgrades, IT security, hardware, network access, third-party software, customized systems utilities software, and software and data backups. This support shall include the generation and validation of new operating systems.

2. Maintain the current revisions of all system software and manuals.

3. Support in the evaluation of new software and hardware available from computer vendors and user groups.

4. Provide support to users of the VLBI computing facility.

5. Make back-ups. Two complete backups of the computer systems shall be made on a monthly basis. Selective backups shall be done on a weekly basis. Priorities for subtasks shall be referred to and approved by the VLBI computer manager.

6. Make system generations within 6 weeks of the receipt of new revisions of software.

7. Maintain an average response time of one working day for user assistance requests.

8. Maintain network connections, computer registrations and handle network problems within one working day.

9. Support in the development and maintenance of an IT security plan.

10. Maintain a Section 508 compliant web site to support the research and programmatic work of the Goddard VLBI group.

11. Document all procedures followed in providing support services.

FINANCIAL MANAGEMENT REPORTING REQUIREMENTS

FINANCIAL MANAGEMENT REPORTING REQUIREMENTS

General

Financial Management Reports shall be submitted by the Contractor on the NASA 533 series reports, in accordance with the instructions on the reverse of the forms, NASA Procedures and Guidelines NPG 9501.2D entitled, "NASA Contractor Financial Management Reporting," effective date May 23, 2001, and additional instructions issued by the Contracting Officer.

a. Level of Detail

The Contractor's 533 reports shall contain a summary of total contract costs, as well as a separate 533 sheet for each Task Orders. The reports shall contain a breakdown of each area by element of cost, i.e. direct labor hours/dollars (by category), overhead, general & administrative (G&A), travel, equipment, material, and other direct costs.

b. Distribution

The Contractor shall distribute 533 reports to each addressee indicated in the Clause G.1 FINANCIAL MANAGEMENT REPORTING. These reports shall be distributed not later than the fifteenth (15) calendar day following the month being reported.

c. Reporting Requirements

Each report shall provide cost data for reporting categories presented below:

1. Direct Labor Hours
   (List applicable labor categories)
   Onsite
   Offsite

2. Direct Labor Dollars
   (List according to applicable labor categories)
   Onsite
   Offsite

3. Overhead Expenses
   Onsite
   Offsite

4. Other Direct Costs
   Travel
   Equipment

Materials
Subcontracts
Miscellaneous ODC's

5. Subtotal (Direct Cost plus Overhead)

6. G&A Expense

7. Total Cost

8. Fixed Fee

9. Total Cost Plus Fixed Fee (CPFF)

The 533 for each task order shall report direct labor hours by category.

INSTALLATION ACCOUNTABLE GOVERNMENT PROPERTY

		CONTRACTOR USED EQUIPMENT			#(GFE) Facilities	AGENCY PECULIAR EQUIP												
ECN	DESCRIPTION	MFR	MODEL	CO !	PC*	Fld Sys	WS !	VBLI SPECIF FUNCTION	CARE TAKER**									
0087108	REPEATER,ETHERNET	DEC	DEMPE-AA	RT				X										
1099560	PRINTER,LSRJT III	H/P	33491A [Si]	RT			X											
1103300	COMPUTER, WORKSTA	H/P	9000/730CRX	RT			X											
1103301	MONITOR, WORKSTA	H/P	A1097-A	RT			X											
1106486	COMPUTER, WORKSTA	H/P	A1933A [735]	RT			X											
1106487	MONITOR, WORKSTA	H/P	A1097-C	NV			X											
1106698	DISK DRIVE, 1.3Gb	H/P	1350SX	RT			X											
1107416	COMPUTER, WORKSTA	H/P	A1094 [735]	RT			X	USED FOR SPARE PARTS										
1107417	MONITOR, WORKSTA	H/P	A1097-C	RT			X											
1185513	MONITOR	H/P	A1097C	RT														
1188872	COMPUTER, WORKSTA	H/P	705	RT			X											
1188873	DISPLAY,COLOR 17"	H/P	A1497-A	RT			X											
1188992	COMPUTER, WORKSTA	H/P	705	RT			X											
1193016	COMPUTER, WORKSTA	H/P	710	RT														
1336615	WORKSTATION/LUPUS	H/P	715/33	RT														
1337853	DISKDRIVE, MINI TWR.	H/P	C3023T	RT			X											
1339846	COMPUTER, WORKSTA	H/P	SA031* [730]	RT			X											
1339930	MONITOR/LUPUS	H/P	A2094-A	RT														
1416170	DISPLAY, W/INTRFC	H/P	A4033A	RT														
1419507	DRIVE, CD-ROM	H/P	2655A	RT			X											
1520754	DISK DRIVE, TWR	H/P	C3040TW	NV			X											
1530401	COMPUTER, PENTIUM	DELL	MMS	RT			X											
1750272	COMPUTER, WORKST	H/P	A4522A/ C160	NV			X											
1752920	CRT	MICRO	15FGX	RT														
1755880	COMPUTER, PENTIUM	SWTEC	P166	NV			X											
1756516	MONITOR,SVGA,17"	VIEWS	1769GS-2[17GS]	NV			X											
1952395	DISPLAY UNIT, 17"	VIEWS	VCDTS21406	NV		X		X										
1952396	COMPUTER, MICRO	SWTEC	PII450 [P3]	NV		X		X										
1952398	MONITOR, SVGA,19"	NOKIA	445XIPLUS	NV		X		X										
1952399	COMPUTER, MICRO	SWTEC	P2/300	NV		X		X										
1953154	COMPUTER, MICRO	MICRO	SE440BX-ATX	NV	X													
1955017	COMPUTER, WORKSTA	H/P	715/80	RT			X											
1955824	COMPUTER, MICRO,	MICRO	SE440BX2-P1145	NV			X											
2040293	COMPUTER, WORKSTA	H/P	A5992A [785]	RT			X											
2042320	DISK DRV SUB SYST	RAID	MT34L12	RT														
3014429	COMPUTER, WKSTA	H/P	A4988A(REFUB)	RT														
THE FOLLOWING EQUIPMENT WAS ADDED AS OF 12/20/2005																		
024138	COUNTER	H/P	5316															
1107188	COMPUTER, WORKSTA	H/P	A1094A															
1183718	MONITOR	H/P	A1497-A															
1210529	CPU	INTEL																
1738021	COUNTER	H/P	53131															
1816467	SUPERSCRIPT PRINTE	H/P																
1950696	PRINTER	H/P	2000C															
1957839	CD-RW	YAMAHA	SCSI															

		CONTRACTOR USED EQUIPMENT			#(GFE) Facilities	AGENCY PECULIAR EQUIP												
ECN	DESCRIPTION	MFR	MODEL	CO !	PC*	Fld Sys	WS !	VBLI SPECIF FUNCTION	CARE TAKER**									
2042330	LASERJET	H/P	4050N															
2109776	SYNCMASTER	SAMSUNG	770															
2164196	CPU	INTEL	686															
3010103	CPU	DELL	PRECISION 340															
3010104	MONITOR	DELL																
3010211	MONITOR, MULTISYNC	NEC																
3014435	MONITOR, FLAT SCRN	VIEW SONIC	VX2000															
3036109	CPU	SWT	PENTIUM															
3038017	MONITOR, MULTISYNC	NEC	FE2111															
3038711	CPU	DELL	DIMENSION 4600															
3067848	CPU	DELL	DIMENSION 4700															
THE FOLLOWING EQUIPMENT NEED AN ECN NUMBER (NOT TAGGED) AS OF 12/20/2005																		
	DISK TOWER	RAID	FT04-L12-1		SN# 020605989223													
	EXTERNAL DISK DRIVE	LACIE	500GB		SN# 154305264													
	MONITOR, FLAT SCRN	VIEW SONIC	VG700		SN# A14035100559													
		GOVERNMENT EQUIPMENT																

* ALL PC AND WORKSTATIONS BOTH CONTRACTOR AND GOVERNMENT SERVANT ARE INTERCONNECTED WITHIN A VLBI GROUP INTRA-NETWORK, EACH HAVING SHARED AREAS ON THEIR COMPUTERS AVAILABLE TO ALL OTHERS IN THE GROUP NETWORK.

** THESE ITEMS HAVE BEEN ASSIGNED THIS "USER" ONLY IN THAT THEY ARE IN THE SAME AREA/ ROOM AS THE EQUIPMENT AND HAVE AGREED TO AID THE PROPERTY CUSTODIAN IN BEING COGNIZANT OF THEIR LOCATION AND SECURITY.

! WS: Work Stations
RT: RITSS
NV: NVI
CC: CIVIL SERVAN

EQUIPMENT WHICH IS NOW FURNISHED ONSITE BY THE GOVN.T BUT MUST BE REPLACED BY THE CONTRACTOR WHEN ITS UTILITY IS NO LONGER ADEQUATE TO FULFILL ITS CONTRACTUAL WORK DESCRIPTION

SAFETY AND HEALTH PLAN

Subfactor D. Safety & Health Plan

NVI fosters a proactive safety culture throughout the company. NVI's Health and Safety goal is to prevent accidents before they happen. We have been successful in this goal. There have been no on-the-job accidents on any of its contracts since its founding in 1992.

NVI's Health and Safety Plan is modeled on the requirements of NPR 8715.3 Appendix H.

1.0 Management Leadership & Employee Participation

1.1 Policy. NVI's policy is, in summary, to foster a proactive safety culture throughout the company to maintain the health and safety of its employees and support the safety and health requirements of its customers. This policy differs from the NASA policy statement in that it is much less detailed owing to the fact that NVI is a small employee owned company, not currently involved in hazardous operations or use of hazardous materials. However, NVI's policy has the same intent which is to ensure the overall safety and health of employees.

This entire document comprises NVI's Health and Safety Plan (HSP) for this contract.

1.2 Goals &Objectives. NVI's Health & Safety (H&S) goal is employee safety. We strive for:

1. accident prevention,
2. prompt response in case of any emergency.

NVI will perform an annual Performance Evaluation Profile (PEP), and will address any deficiencies found.

1.3 Management Leadership. The management at NVI leads by example. They make sure that their own work environment is safe. They are aware of all of the procedures in this safety manual. They actively participate in accident and incident report evaluations to ensure that underlying causes are identified and effective preventive measures are promptly initiated.

The NVI Administrator will be the NVI Safety Officer (SO), responsible for staff adherence to NVI's HSP and GSFC's H&S directives.

NVI will keep a safety log notebook. This notebook will be available in the NVI SO's office at GSFC. It will contain all NVI safety related material including:

- A copy of the NVI HSP.
- Minutes from the H&S agenda item of the monthly staff meetings.
- Accident reports and investigations.
- Employee initiated reports of hazardous or unsafe conditions.
- Inspection results from the SO.
- Any other material that the NVI SO, in consultation with the Project Manager, deems appropriate.

the Project Manager for the VLBI project, certifies that the NVI HSP will be implemented as approved, and that he will take personal responsibility for its implementation.

1.4 Employee Involvement. Management encourages employee participation in the development and implementation of NVI's HSP. H&S issues are an agenda item on NVI's monthly staff meeting. Employees are encouraged to participate in these meetings, voicing concerns or areas where they see room for employment. Management will ensure that all matters voiced at these meetings are investigated and remedied if appropriate. The status of ongoing investigations will continue to be reported at the monthly meetings until the situation is resolved.

NVI encourages its employees to take health and safety courses on their own time, including CPR and first aid, and will, with the prior concurrence of management, reimburse the employee for tuition.

1.5 Assignment of Responsibility. Responsibility for the development and implementation of NVI's HSP resides with the

company President and the NVI SO. Project Managers (PM) are responsible that the staff on each project comply with the procedures of the HSP. Communication between the SO, PM and staff can be in the form of phone, e-mail, or direct communication.

1.5a Safety Representative. The SO will be responsible for adherence to GSFC's safety, health and related goals.

1.5b Company Physician. NVI has no company physician. The NVI SO,

is the representative between the NASA center clinic and NVI. Her contact information is:

Room G219, Building 33
Mailstop 698
301-614-5938

1.5c Building Warden. SO, is the Corridor G Spine Warden in Building 33. will work with the Building Warden to ensure NVI compliance with H&S issues.

1.5d Designated Safety Official. NVI's SO, is the designated safety official.

1.6 Provision of Authority. NVI will review this plan annually to ensure compliance with federal, state and local regulations and any NASA contractual direction.

1.7 Accountability. Employees are primarily responsible for their own safety, and for adhering to NVI's HSP as well as any center H&S directives. Infractions of NVI's HSP or center directives will be dealt with in accordance with NVI's policies on discipline and will be based on the following factors:

- Severity of the infraction.
- Whether the infraction endangered only the employee or coworkers.
- Whether the infraction was a first or repeat violation.

Disciplinary steps range from verbal warning through written warnings and ultimately to dismissal for repeat or serious offences.

1.8 Program Evaluation. NVI will evaluate its HSP annually by requiring employees and supervisors to complete a PEP. The results of the PEP will be summarized and addressed at monthly staff meetings. NVI will take steps to address deficiencies in its HSP.

1.9 Documentation of HSP performance NVI will keep records of issues raised during its monthly staff meetings concerning H&S, and steps taken to address them. NVI will investigate any safety violation and determine the root cause. NVI will keep a record of all accidents that occur on the job. NVI will make available to the Government NVI's safety log which contains:

- Minutes of the HSP portion of the monthly staff meetings.
- A record of any accidents or violations of NVI's HSP.
- Company investigations of accidents that occur on site.

and other H&S related material.

1.9a Terminated Employees. A roster of terminated employees will be reported to the Center occupational health program office within 30 days at the end of each contract year or the end of the contract. This information will include:

1) Date of report, identification that NVI is submitting the report, and the contract number.

2) Name, social security number, Center badge number and date of termination.

3) Contact information for NVI person tasked with providing further information. This will typically be the Company Administrator.

1.9b Material Safety Data. This contract does not call for NVI to work with hazardous material.

1.9c Hazardous Material Inventory. This contract does not call for NVI to work with hazardous material.

1.10 Government Access to HSP. The government will have access to NVI's H&S documentation at the Government's request.

1.11 Review and Modification. NVI will participate in the review and modification of safety requirements at the COTR's request following established NASA directives and procedures.

1.12 Procurement. NVI does not plan on having any subcontracts.

2.0 Workplace Analysis

2.1 Hazard Identification. NVI will take the steps outlined below to identify and eliminate hazards.

2.1a Comprehensive Survey. At the commencement of this contract, the SO will conduct a wall-to-wall survey of office and work areas to determine any unsafe conditions. These include:

- Ensuring that aisles and exits are kept clear.
- Power cords do not interfere with walkways.
- Power outlets are not overloaded.
- The floor is litter free.
- Objects are stored properly. No objects are stored on top of file cabinets or book cases.
- Sharp objects and tools are properly stored.

The SO will also check for other situations that would compromise the H&S of NVI employees or other staff at GSFC.

2.1b. Change Analysis. If the working environment or center regulations change, the SO will conduct a new comprehensive survey to ensure that the environment is safe.

2.1c. Hazard Analysis. This contract does not call for work under hazardous conditions or with hazardous materials. The SO will analyze working conditions to determine if any hazards are present.

2.2 Inspections. The SO will conduct inspections on a semi-annual basis to ensure compliance with NVI's HSP. The results of this inspection will be written up and reported during the H&S agenda item on the monthly staff meetings. A written record of these inspections will be available for the Government to inspect.

2.2a. Discrepancies. The inspections will include identification of differences between the work environment and materials, particularly hazards, and those specified by the contract.

2.2b. New/Modified Hazards. The inspections will include identification of hazards that may not have been noted before, that may developed since the last inspection, and changes in existing hazards.

2.3 Employee Reports. NVI encourages its employees to immediately report any unsafe or hazardous conditions to either the SO or the PM, who will then determine what action to take. NVI will not reprimand employees for making these reports. These reports, together with the subsequent steps taken, will be documented and become part of NVI's Safety Log.

3.0 Mishap Investigation & Record Analysis

3.1 Mishap Investigation. NVI will promptly investigate any accident or injury incurred or caused by an NVI staff person. A report will be completed on NVI's Accident & Injury Report Form. We will attempt to determine: a) the immediate cause of the accident; b) whether the accident was due to failure to adhere to the NVI HSP; c) steps that can be taken to prevent similar accidents occurring in the future.

NVI will immediately report to the CO or designee any accident, incident, or exposure resulting in fatality, lost-time occupational injury, occupational disease, contamination of property beyond any stated acceptable limits set forth in the contract. NVI will include appropriate detail to address use of NASA Form 1627 "Mishap Report" (or equivalent) for 24-hour and ten-day mishap reports to the Occupational Safety Office.

3.2 Trend Analysis. NVI will investigate any accident reports to see if they are similar to accidents that have occurred in the past. NVI will investigate if there were any factors

in common, and determine ways to abate these factors.

3.2a Accident Incident Summary Report. NVI will provide NASA with a NASA form 1627, "Mishap Report" (or equivalent), including 24-hour and ten-day mishap reports to the Occupational Safety Office. NVI will notify OSHA orally within eight hours any accidents that result in fatalities and any that involve the hospitalization of three or more employees.

NVI will provide monthly Form 301 Injury and Illness Incident Report. All new and open mishaps, including vehicle accidents, injuries, fires, and any close call incidents will be reported. The report shall contain the cause, response details, current status, and future methods of prevention. Negative reports will be submitted to the Center Safety Office by the 10th day of the month following each month reported.

3.2b. Log of Occupational Injuries & Illnesses. NVI will deliver to NASA a copy of its annual OSHA 300A report, which will be compiled on a calendar year basis, within 45 days after the end of the year.

4.0 Hazard Prevention & Control

This contract does not call for NVI to perform any work that would require a) being in the vicinity of a hazardous site, or b) handling hazardous chemicals, discharges, wastes, or c) using hazardous equipment.

4.1 Appropriate Controls. NVI employees working on this contract are forbidden from placing themselves in a hazardous situation while working under this contract. Doing so is grounds for disciplinary action.

4.1.1 Hazardous Operations. NVI employees working on this contract are forbidden from placing themselves in a hazardous situation while working under this contract. If hazardous conditions are found to exist, NVI personnel are required to safely remove themselves from the area where the conditions exist. Not doing so is grounds for disciplinary action. Policies for dealing with hazardous operations will be developed if the contract is ever modified to include them.

4.1.1a Hazardous Operations Policies. NVI employees do not perform hazardous operations under this contract. If the contract is ever modified to include them, NVI will develop policies and procedures for managing and implementing them. NASA will have access on request to all data necessary to verify implementation.

4.1.1a Submission of Hazardous Operations Policies. NVI employees do not perform hazardous operations under this contract. If the contract is ever modified to include them, NVI will develop policies and procedures for managing and implementing them. NVI will follow standard methods that are acceptable to the NASA Occupational Safety Office for submitting these polices and procedures for review and approval.

4.1.2. Written Procedures. This contract does not call for NVI to work with hazardous materials, or in hazardous surroundings. NVI personnel are forbidden from doing so. As such, we have no need for written procedures dealing with proper control of hazardous materials, etc.

4.1.3 Protective Equipment. This contract does not call for NVI personnel to do any work that would require wearing protective equipment.

4.1.4 Hazardous Operations Permits. This contract does not call for NVI do any work that would require hazardous operations permits.

4.2 Baseline Documentation. This is not applicable to NVI on this contract.

4.3 Preventive Maintenance. NVI assumes that GSFC will perform any required preventive maintenance to ensure that our work environment on site is safe.

4.4 Medical Program. NVI does not have a medical surveillance program. NVI encourages its employees to take H&S on their own time, including CPR and first aid, and will,

with the prior concurrence of management, reimburse the employee for tuition.

5.0 Emergency Response

The NVI SO will conduct training at GSFC to ensure that all NVI employees are familiar with the location of emergency exits, first aid kit, fire extinguishers and other safety aids. The SO will ensure that NVI employees familiarize themselves with the emergency procedures and evacuation plans posted prominently in common areas and bulletin boards on each floor of the facility.

In any emergency, employees should follow alarms or other alerts to evacuate the building and/or area near the premises. NVI employees are expected to follow the basic evacuation procedures but remember that personal safety is paramount and takes precedence. This includes:

- Check work area for anything needing to be secured and store it quickly.
- Secure locks on all secured containers and cabinets.
- Leave your work area and report to your designated assembly area.

CFR 1910.120 Compliance. NVI does not anticipate working with any hazardous materials during the course of this contract. As such this provision does not apply.

6.0 Safety & Health Training

NVI encourages its employees to take advantage of H&S programs made available by GSFC.

NVI's SO will regularly monitor bulletin boards and other resources to keep abreast of any H&S classes that the center provides. The SO will alert NVI employees of H&S classes, and encourage their attendance.

DIRECT AND INDIRECT RATE MATRICES

DIRECT AND INDIRECT RATE MATRICES

1. Prime Direct Labor Rate Matrix (For All Task Orders):

The Contractor shall not exceed the bid rates as specified below for pricing all task orders contemplated or issued in accordance with Clause H.7, Task Ordering Procedure and Clause B.10 Supplemental Task Order Procedures. Any task orders issued in accordance with Clauses H.7 and B.10 will be applied to the guaranteed minimum quantity and maximum quantity as provided in Clause B. 2 Minimum/Maximum Amount of Supplies or Services.

Labor Category	2007 CY01	2008 CY02	2009 CY03	2010 CY04	2011 CY05	2012 CY06
Project Manager						
Deputy Project Manager						
Chief Scientist						
Principal Scientist						
Senior Scientist						
Scientist						
Associate Scientist						
Chief Programmer/Analyst						
Principal Programmer/Analyst						
Senior Programmer/Analyst						
Programmer/Analyst						
Associate Programmer/Analyst						
Chief Data Analyst						
Principal Data Analyst						
Senior Data Analyst						
Data Analyst						
Associate Data Analyst						
Chief Systems Administrator						
Principal Systems Administrator						
Senior Systems Administrator						
Systems Administrator						
Associate Systems Administrator						
Senior Data Technician						
Data Tech						
Associate Data Technician						
Senior Administrator						
Administrator						
Associate Administrator						

*CY = Contract Year

DIRECT AND INDIRECT RATE MATRICES

^HR = Hourly Rate: These are not-to-exceed rates for pricing prime contractor task orders. The Contractor may propose lower rates when pricing task orders.

**Labor Categories: The Offeror shall provide direct labor categories, which apply to the representative task orders and the SOW.

2. Prime Indirect Cost Rate Matrix (For All Task Orders):

The Contractor shall not exceed the bid rates as specified below for pricing all task orders contemplated or issued in accordance with Clause H.7, Task Ordering Procedure and Clause B.10 Supplemental Task Order Procedures (see Clause B.3, Limitation of Indirect Costs, for ceilings on reimbursement of indirect costs. Any task orders issued in accordance with Clauses H.7 and B.10 will be applied to the guaranteed minimum quantity and maximum quantity as provided in Clause B. 2 Minimum/Maximum Amount of Supplies or Services.

Indirect Cost	Base of Application	CFY1	CFY2	CFY3	CFY4	CFY5	CFY5
Onsite Overhead [includes fringe]	Direct Labor						
Offsite Overhead [includes fringe]	Direct Labor						
G&A	Direct Labor, Overhead & ODCs						

*CY – Contract Year

***Indirect Expenses: The Offeror shall complete all indirect categories, which apply to the representative task and the SOW. Clearly delineate on-site and off-site rates.

3. Prime Fixed Fee Rate Matrix (For All Task Order)

	2007	2008	2009	2010	2011	2012
	CY01	CY02	CY03	CY04	CY05	CY06
Fee	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%

*CY-Contract Year

****The Offeror shall complete the fixed fee rate matrix, which shall be used to calculate the fixed fee for all task orders issued under the resultant contract.

4. Subcontractor Loaded Labor Rate Matrix (For All Task Orders):

None.

DIRECT AND INDIRECT RATE MATRICES

5. POSITION DESCRIPTIONS-TBP (For Offeror and Subcontractor Categories):

Project Manager Category. Exempt			
Position Title	**Required Education**	**Experience Level**	**Position Summary**
Project Manager			
Deputy Project Manager			

Scientist Category. Exempt			
Position Title	**Required Education**	**Experience Level**	**Position Summary**
Chief Scientist			
Principal Scientist			
Senior Scientist			
Scientist			
Associate Scientist			

Programmer Analyst Category. Exempt			
Position Title	**Required Education**	**Experience Level**	**Position Summary**
Chief Programmer/ Analyst			

DIRECT AND INDIRECT RATE MATRICES

Principal Programmer/ Analyst	
Senior Programmer/ Analyst	
Programmer/ Analyst	
Associate Programmer/ Analyst	

Data Analyst Category. Exempt			
Position Title	**Required Education**	**Experience Level**	**Position Summary**
Chief Data Analyst			
Principal Data Analyst			
Senior Data Analyst			
Data Analyst			
Associate Data Analyst			

System Administrator Category. Exempt			
Position Title	**Required Education**	**Experience Level**	**Position Summary**
Chief Systems Administrator			

DIRECT AND INDIRECT RATE MATRICES

Principal Systems Administrator			
Senior Systems Administrator			
Systems Administrator			
Associate Systems Administrator			

Data Technician Category. Non-Exempt			
Position Title	**Required Education**	**Experience Level**	**Position Summary**
Senior Data Technician			
Data Technician			
Associate Data Technician			

INFORMATION TECHNOLOGY SECURITY PLAN

INFORMATION TECHNOLOGY SECURITY PLAN (IT SECURITY PLAN)

The IT Security Plan is to be submitted within 30 days after contract award. The plan will be incorporated into the contract after it has been reviewed and approved by the Government.

IT SECURITY PLAN

A. **Computer systems covered**. NVI will be responsible for IT security for all computer systems connected to the NASA network, either directly or indirectly, and that are operated or maintained by NVI staff in the performance of this contract. Specifically this includes:
   a. Workstations at Goddard Spaceflight Center (GSFC) maintained by NVI for the VLBI and SLR group in Code 698. Specifically this includes various HP and Sun workstations, and Linux systems. At the start of this contract on January 1, 2007, this included 11 HP and 9 Sun workstations, and 3 Linux PCs.
   b. Windows PCs at GSFC which are used by NVI staff and connected directly to the Goddard network.
   c. Windows PCs which are used by NVI staff to connect remotely to the Goddard network
   d. Mac PCs at GSFC used by the SLR group.

B. **IT Security Plan**. NVI will take the following steps to ensure that the computers that it is responsible for are secure.
   a. Workstations and Linux systems. NVI will ensure that all HP and Sun workstations and Linux systems have the latest security patches installed. NVI will enable only those system services that are actually required. NVI will review system logs for evidence of suspicious behavior and intrusion detection. NVI will periodically run software to determine that user passwords are not easy to guess. NVI will perform regular backups to ensure that in the event of a security breach or hardware failure no critical data is lost.
   b. NVI will ensure that all PCs connected to the GSFC network either directly of indirectly have current anti-virus and anti-spyware software installed. NVI will also ensure that all PCs have the latest security patches, DAT files, and signatures installed.
   c. General. NVI will monitor GSFC announcements regarding IT security to ensure that it is compliant with center policy.

C. **Submission of Plan**. NVI has submitted this plan 30 days after the start of the contract.

D. **Privileged Access**. Most NVI employees on this contract have completed NASA Form 531 and FC 258 in the last 3 years. We believe the remaining employees are exempt from this requirement. However, at NASA's direction we will request any employees on this contract that have not previously filled out theses forms to do so.

E. **Training.** All NVI staff will receive annual IT security training in NASA IT Security policies, procedures, computer ethics, and best practices. We will use web-based training provided by NASA for these purposes.

F. **Access to NVI Facilities.** NASA shall have access to any NVI or subcontractor facilities used in the performance of this contract to the extent required to carry out a program of IT inspection.

G. **Part of Contract**. NVI shall incorporate the substance of 1852.204-76 "Security Requirements for Unclassified Information Technology Resources" in all its sub-contracts.

GOVERNMENT SURVEILLANCE PLAN

Addendum A
NNG07HW03C

GOVERNMENT SURVEILLANCE PLAN

NNG07HW03C

PERFORMANCE-BASED RESEARCH AND DEVELOPMENT SERVICES FOR VERY LONG BASELINE INTERFEROMETRY (VLBI) IN SUPPORT OF PLANETARY GEODYNAMICS LABORATORY, CODE 698

"FOR INFORMATION PURPOSES ONLY"

FOREWARD

Under performance-based contracts, such as this one, the Contractor assumes more responsibility and greater risk in exchange for more flexibility and less direct Government involvement in contract activities. However, the Government still has a responsibility to conduct surveillance. Surveillance spans a spectrum of Government involvement. Surveillance may be as simple as inspecting a delivered service at acceptance or as complex as continually monitoring Contractor performance. To meet this responsibility, the Government needs to understand the risks involved in the Contractor's activity and how the Contractor is managing those risks.

This Surveillance Plan has been prepared in accordance with NPR 8735.2, Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts, to describe the Government's surveillance of this contract. It is a "living" document that will be tailored to reflect the final contract award. The Government welcomes suggestions for improving this Plan. Of particular interest are ideas on what information the Government should monitor (i.e., metrics) and how the Government can most cost-effectively obtain the relevant performance data it needs.

"FOR INFORMATION PURPOSES ONLY"

1.0. INTRODUCTION

1.1 Purpose

The purpose of this Surveillance Plan is to define the overall approach and identify specific techniques that NASA Goddard Space Flight Center (GSFC) intends to use to monitor Contractor performance under Contract No. NNG07HW03C. This plan defines the process the Government expects to follow to obtain data, evaluate the Contractor, and determine if contract performance is acceptable. The goal is to balance the level of Government surveillance with the perceived impacts and risks associated with performance hereunder. The Government reserves the right to modify this Plan at any time during the contract.

1.2 Scope

This plan identifies program requirements, strategy, resources, review and control processes, and surveillance activities for continuous measurement of Contractor performance under Contract No. NNG07HW03C. It is intended to be a "living" document from which resources and activities will evolve from one phase to another during the life of the contract. The plan will be updated as required.

1.3 Program Definition and Contract Description

The purpose of this contract is to provide support to NASA GSFC's Planetary Geodynamics Laboratory. This procurement will result in a performance based Cost Plus Fixed Fee Indefinite Delivery/Indefinite Quantity (CPFF - IDIQ) contract. Under this contract arrangement, the Statement of Work (SOW) will describe the overall scope of the contract. The specific requirements will be defined in individual task orders issued against the contract. The basic period of performance is 5 years with no options. This contract will be performed primarily on-site at NASA GSFC.

This contract will support the Planetary Geodynamics Laboratory in the areas of (but not limited to): acquiring, processing, and analyzing scientific data; evaluation of existing systems; development of new software; programming; algorithm development; mission planning; and public outreach and database management. This contract also includes technical support of data acquisition, processing and analysis capabilities at cooperating U.S. and foreign agencies and institutions as well as administrative and technical support of international organizations with components located at Goddard Space Flight Center. This support is categorized by the following functions: scientific, computing, engineering, and administrative support.

1.4 Guiding Directives

The guiding documents for this surveillance effort include the contract's SOW and the individual task orders issued against the contract. The SOW identifies general

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performance requirements, and the task orders identify specific objectives or results desired for each requirement. In addition, the task orders identify specific performance standards, including deliverable requirements specified therein.

2.0 Surveillance Strategy Definitions

2.1 Insight

Insight is an assurance process that uses performance requirements and if definable, performance metrics to ensure process capability, product quality and end-item effectiveness. Insight relies on gathering a minimum set of product or process data that provides adequate visibility into the integrity of the product or process. The data may be acquired from Contractor records, usually in a non-intrusive parallel method.

Insight as applied to this contract will result in lower levels of Government surveillance and allow the Contractor to assume increased responsibility and accountability for the integrity of processes. Insight will rely heavily on evaluating planned contract deliverables, performance standards, and existing Contractor procedures and working documents, if available.

2.2 Oversight

Oversight as applied to this contract and the task orders issued therein will result in higher levels of Government surveillance. The Government will gather information pertaining to the Contractor's process through on-site involvement and/or inspection in the process and will monitor the process itself. The Government's involvement in the Contractor's performance through oversight will be determined as necessary by the Contracting Officer's Technical Representative.

3.0 RESOURCES

3.1 General

All surveillance activities will be implemented using NASA and Contractor personnel. The surveillance team may be composed of:

a GSFC Earth Sciences Directorate support personnel (i.e., contracting officer's technical representative and financial analyst(s));

b GSFC Safety & Health and Security personnel;

c NASA Safety and Mission Assurance Lead (Code 300);

d Resident Office or Defense Contract Management Agency (DCMA) personnel at the Contractor's facility (if appropriate);

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e Earth Sciences Procurement personnel (Contracting Officer and Contract Specialist)

3.2 Surveillance Team

The surveillance team will be composed of key Planetary Geodynamics Laboratory (Code 698) and the Earth Sciences Procurement Office (Code 210.Y) Government personnel. The team's primary purpose will be to provide direction for contract surveillance activities and to serve as the Government's focal point in reviewing and evaluating overall Contractor performance under Contract No. NNG07HW03C. The team will obtain information from various sources, including deliverable Contractor documents, communications with the Contractor, and reports by other personnel or representatives (e.g., Government Technical Representatives, GSFC Health & Safety personnel, DCMA) who interact with the Contractor.

All available information will be evaluated, and any action by GSFC will be determined based upon the scope and magnitude of any particular issue or problem. The surveillance team chairperson (COTR) will formally notify the Contracting Officer of situations where it is perceived that the Contractor has failed to take prudent corrective or preventive action, of situations perceived to increase risk, or of findings of continued contractual non-compliance.

3.3 Defense Contract Management Agency (DCMA), if participating

A DCMA representative may be collocated with the Contractor. The DCMA representative may support the Contracting Officer with the surveillance effort in accordance with the provisions of the GSFC Letter of Delegation and this plan.

4.0 SURVEILLANCE STRATEGY AND APPROACH

4.1 General

The level of risk and the impact of failure are major determinants in helping define the type of surveillance to be conducted. Clearly, if the impact of failure is minor and the level of risk is low, only a small amount of insight-driven surveillance would normally be needed. Conversely, if the impact of failure could be significant and the level of risk is high, more extensive surveillance (including possible oversight surveillance) is warranted.

GSFC will strive to use an insight-driven surveillance approach throughout the period of performance of Contract No. NNG07HW03C. The overall surveillance goal will be to obtain objective evidence and data that enable the Government to determine whether the Contractor's program and processes are functioning as intended in accordance with the terms of the contract. The focus will be on prevention rather than detection, i.e., emphasizing controlled processes and methods of operation, as opposed to relying solely upon inspection and test to identify problems.

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Surveillance team members will have open access to all areas in which this contract is being performed and will interface directly with their Contractor counterparts. They will document problems, concerns and issues, and take note of Contractor accomplishments. They will collect performance metric data, where applicable and will participate in Contractor review meetings, such as those described herein. Information will flow from individual team members through the COTR to surveillance team representatives, who will present issues and achievements at surveillance team meetings. Information gained from these formal and informal exchanges of ideas and collection of data will be compiled and evaluated as a continuous measure of contract performance.

The COTR will annually complete a NASA Form 1680, entitled, "Evaluation of Performance" which will also be reviewed by the Contractor, and become a part of the active GSFC Past Performance Database.

4.2 Forms of Surveillance

Under this contract, surveillance will take the following forms:

4.2.1 Communications

- Informal discussions
- Electronic mail
- Surveillance team meetings
- Progress reviews
- Technical information meetings
- Other communication methods, as needed

4.2.2 Evaluation and Reporting

- Review of deliverables from contract data requirements list
- Review of task order unique products/documentation
- Documentation of problems, issues and concerns
- Data collection reporting

5.0 SELECTED SURVEILLANCE ACTIVITIES

The following selected activities will be performed by various surveillance team members during applicable stages of contract performance:

Area of Risk Identified	Impact to Government	Surveillance Team Activity
Data Processing, Analysis and Distribution of Results	Failure to deliver timely or accurate data products	Review Contractor's surveillance plan to ensure proper tracking and quality of data products. Sample Contractor's tracking records.

Area of Risk Identified	Impact to Government	Surveillance Team Activity
Experiment Coordination	Data acquisition compromised	Review Master Observing Schedule and updates.
IVS Support	Failure to meet IVS responsibilities taken on by GSFC	Review Contractor's staffing of IVS positions and completion of IVS activities.
Field System	Failure or deficiency of data acquisition	Review Contractor's surveillance plan to assure proper updating and problem resolution.
Computer Security	Potential corruption and loss of data; disruption of schedule	Review Contractor's surveillance plan to ensure firewalls and protection software will be used.
Algorithm Development and Coding	Failure to produce correct data products	Review Contractor's surveillance plan to ensure that planned tests will be conducted under controlled conditions.
Configuration Management Documents	Erroneous use of computer codes and equipment	The surveillance team will periodically sample the current available background documentation.
Control and Maintenance of Property	Loss of or damage to equipment; potential schedule impact	Review Contractor property management techniques, compliance with policies, and record-keeping via sampling techniques during Government semi-annual walkthrough inspections.
Computer System and Network Administration and Operation	Diminution of computing power; loss of data and analysis	All GSFC users of system have access to system, and recognize system downtime or slow system response.
Safety	Potential for lost or restricted workdays and injury to personnel; potential of loss or damage to equipment.	The Government will evaluate the Contractor's safety and health plan. The surveillance team will conduct semi-annual walkthrough inspections to ensure compliance with safety and health requirements.
Analysis Technical Writing and Archiving	Support data inadequate to document analyzed results, resulting in possible misinterpretation of data	The Government will maintain an on-site independent presence to verify and validate critical processes and procedures.
Technical Documentation and Archiving	Loss of knowledge of processes and results	The Government will periodically sample documents (review for accuracy).
Quality of Work Force	I. Unfilled positions: a. Inability to meet commitments on scheduled	Surveillance team will do the following: a. Track time required to fill positions and Contractor efforts & approaches

Area of Risk Identified	Impact to Government	Surveillance Team Activity
	deliverables or science results including NASA Performance Metrics b. Additional cost resulting from decreased productivity of other staff reliant on unfilled staff positions II. Inadequate experience or expertise: a. Same as Ia. b. Same as Ib. c. Poorer data quality, e.g., derived products, through impacts on algorithm development & evaluation Delayed data delivery and poor data quality also impacts NASA supported research outside GSFC	used to fill vacancies. b. Assess Contractor efforts to train staff in areas of required expertise. c. Evaluate skill levels of Contractor staff, e.g., routine presentation and documentation of analysis. d. Recommend staffing realignments as deemed necessary to ensure critical tasks remain on schedule
Funding/Cost	Inability to implement contract requirements	The Contracting Officer's Technical Representative and the contracts financial analyst will evaluate and monitor costs incurred on a monthly basis resulting from NASA financial reporting requirements due from the Contractor on a monthly or quarterly basis.

Surveillance team members will have broad background and experience working with the programs supported under Contract No. NNG07HW03C. They will participate in review meetings, such as those described in Section 4.0. They will provide assistance, as necessary, with the development and approval of technical requirements, flow-down of requirements, and with design, development, production and test activities. They will also maintain insight into the Contractor's compliance with relevant deliverables submitted under the contract. When the Government has concerns regarding Contractor performance, surveillance team members may conduct independent audits of the Contractor's activities, processes, products, documentation and data in order to provide assurance that the program is being implemented according to all requirements and specifications. These audits will normally be conducted with advance notification and coordinated with the Contractor. However, the Government reserves the right to conduct unscheduled audits when evidence indicates that Contractor performance is deficient.

5.6 Performance Verification

The term 'Performance Verification' in the context of this plan refers to the activities related to the insight activities. Additionally, specific performance requirements are provided in the SOW and the task order SOW requirements. Audits as described above may be considered necessary for performance verification.

5.7 Safety

The responsibility for meeting all safety requirements rests with the Contractor. Surveillance team safety engineers and technical personnel will review Contractor-generated hazard analyses, safety compliance data packages or other safety-related documentation, as appropriate; to help ensure all safety requirements have been satisfied. Surveillance team personnel will also maintain insight into the Contractor's safety activities through the review of the Contractor's submitted Health and Safety Plan as required by this contract.

6.0 SUMMARY

This Surveillance Plan describes the approach NASA Goddard Space Flight Center (GSFC) intends to use to monitor Contract No. NNG07HW03C and assure that the Contractor performs in accordance with terms and conditions of the Contract. GSFC anticipates using an insight surveillance approach. The goal is to balance the level of Government surveillance with the perceived impacts and risks of mission failure.

GSFC plans to utilize a surveillance team to evaluate Contractor performance and direct surveillance activities. The team will be supported by Government Technical Representatives to obtain data and provide information on Contractor activities. The team will establish and rely on objective and subjective performance metrics based on the SOW and task order requirements to evaluate Contractor performance against requirements.

As experience is gained with the Contractor, or new task orders are issued against this contract, the Government reserves the right to change this Surveillance Plan and the metrics used to evaluate Contractor performance.