

PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS

B-1 SCOPE

(a) This Contract is the sponsoring agreement between the National Aeronautics and Space Administration (NASA) and the California Institute of Technology (Contractor), a private nonprofit educational institution, which establishes the relationship for the operation of the Federally Funded Research and Development Center (FFRDC) known as the Jet Propulsion Laboratory (JPL). This Contract is the only document that constitutes the sponsoring agreement between the parties.

(b) As reflected in FAR 35.017, contractors operating FFRDCs are allowed access to Government and supplier data, including sensitive and proprietary data, and to Government employees and facilities beyond that which is common to the normal contractual relationship. Because of this special relationship, JPL shall be operated in the public interest with objectivity and independence, be free from organizational conflicts of interest, and have full disclosure of its affairs to NASA. Additionally, the Contractor shall not use its privileged information or access to facilities to compete with the private sector in contravention of FAR 35.017. Notwithstanding the special relationship created by this sponsoring agreement, the California Institute of Technology is acting as a contractor and not as an agent of the Government.

(c) The Contractor shall perform the work that is designated in task orders issued by the Contracting Officer using procedures set forth in Clause G-6 (Task Order Procedure). The general areas of such work for which the Contractor is encouraged to maintain its expertise to provide a quick response capability, are described in Clause C-1 (Description of Work).

B-2 ESTIMATED COST AND FEE (Modification 77)

(a) The estimated cost of this Contract will be the sum of the estimated costs set forth in task orders issued hereunder, including all amendments thereto. It is anticipated that the Government will allot funds to task orders from time to time, and such funds shall be available for the payment of allowable costs incurred in the performance of work under the task orders, until the funds allotted equal the estimated costs set forth in the task orders. The amount of such allotted funds, as it may be changed from time to time, shall be specified in each task order.

(b) Award Fee was applicable for the period October 1, 2003, through September 30, 2010. Fixed Fee, paid in accordance with B-7, is applicable for the period October 1, 2010, through March 31, 2012. The parties have mutually agreed to make Fixed Fee retroactive to and effective as of the start of fiscal year 2011, October 1, 2010. **(Modification 77)**

(Modification 77 Deleted old (b) – (k) entirely)

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B-3 COST AND PERFORMANCE INCENTIVES FOR TASKS

The Government may require the incorporation of cost and/or performance incentives for task orders issued under this Contract. The performance incentives will measure the performance against the salient performance requirement, called "unit(s) of measurement," e.g., months in service or amount of data transmitted, identified in the task order. Performance incentives will be incorporated in the task order in accordance with Clause G-6 (Task Order Procedure). These incentive fees are in addition to and not inclusive of the Contract's fixed fee. (**Modification 77**)

B-4 BUDGETARY ESTIMATES AND FUNDING

(a) The Contractor shall prepare and submit budgetary estimates as directed by the Contracting Officer. The estimates shall set forth the funding requirements for each succeeding fiscal year remaining in the term of each task order under which the Contractor anticipates work will be performed. The budgetary estimates shall be supported by detailed discussions of the funding requirements, by a list of major procurements to the extent known at the time, and by such additional information as the Contracting Officer may need for planning purposes. The Contractor shall also prepare and submit budgetary estimates in the formats required by NASA in order to support NASA's annual Program Operating Plan (POP) submission. The Contractor shall submit the POP information per annual guidance supplied by NASA. The POP submission will be forwarded to the NASA Enterprises with a copy to the Contracting Officer.

(b) From time to time, the Contractor may submit revised budgetary estimates and recommend changes in the approved funding of any task order, or the issuance of new task orders. The Contracting Officer shall inform the Contractor of the action taken with respect thereto. In the event the Contracting Officer initiates changes in the approved funding, as much advance notice thereof as possible shall be provided to the Contractor.

(c) In the event of changes in approved funding, the Contracting Officer shall promptly issue task orders or task order amendments, in accordance with the procedure established in Clause G-6 (Task Order Procedure), reflecting the changes.

B-5 ALLOWABLE COSTS

(a) General. For the purpose of determining the amounts payable to the Contractor under this Contract, the allowability of costs shall be determined by the Contracting Officer in accordance with:

(1) Federal Acquisition Regulation (FAR) 31.2, Contracts with Commercial Organizations, and

(2) The terms of this Contract.

In determining the allowability of costs, the Contracting Officer shall give effect to the advance understandings set forth below and to other provisions in this Contract dealing with allowable costs.

While OMB Circular A-21 will not apply to the Contract, determination of the allowability of costs relative to the institutional indirect costs in C-2 below, benefits, and Interdivisional Authorizations will be consistent with A-21 cost principles. In the case of an inconsistency between the provisions of this Contract and FAR Part 31.2, the provisions of this clause shall govern.

(b) Direct Costs. All costs incurred by the Contractor in connection with the operation of JPL under this Contract, except for those costs identified in B-5(c), Institutional Indirect Costs, shall be considered direct costs.

(c) Institutional Indirect Costs. Allowable items of institutional indirect costs (also referred to as Facilities and Administration costs), originating from the campus of the Contractor and being charged to this Contract shall include the following:

(1) Campus Work. The Contractor shall be reimbursed for institutional indirect costs of work performed on the campus of the Contractor or at the Contractor's other non-JPL facilities during each of the Contractor's fiscal years. Reimbursement will be on the basis of those overhead rates for such fiscal years as are negotiated between the Contractor and representatives of the Government for those Government contracts under which the preponderance (in dollar amount) of Government work is performed on the campus of the Contractor. If a negotiated rate is provisional, the Contractor shall be reimbursed on the basis of this provisional rate, subject to an appropriate adjustment when the final rate for that period is established.

(2) JPL Work. In lieu of institutional indirect costs applicable to all other work performed by the Contractor for each of the Contractor's fiscal years, the Contractor shall be reimbursed in an amount negotiated between the parties for that fiscal year. The negotiated lump sum for institutional indirect costs will be an offset to the Contractor's total institutional indirect costs prior to the application of the overhead rate discussed in subparagraph B-5(c)(1), above. Such negotiated amounts and the period to which they apply, shall be set forth in modifications to this Contract. Pending an agreement as to such negotiated amount for each period, the Contractor shall be paid provisionally on a monthly basis in an amount of one-twelfth of the last negotiated amount. If the Government determines that the total amount of such provisional payments will substantially exceed the anticipated final negotiated amount for that period, the Contracting Officer will direct the suspension or reduction of future payments and/or request a prompt refund of excess payments as appropriate. In addition, the Contracting Officer may reduce or withhold such provisional payments in the event the Contracting Officer determines that the Contractor has not submitted timely information to support its institutional indirect costs for such period.

Modification 16:

A. Pursuant to the provisions of Clause B-5 (c) (2) of Contract NAS7-03001, the Contractor shall be reimbursed a Lump Sum amount of \$12,000,000 for fiscal year (FY) 2004 efforts. This amount is in lieu of institutional facilities and administration (F&A) costs applicable to all research and development contracts performed at the Jet Propulsion Laboratory during the period October 1, 2003 through September 29, 2004 (FY 04).

B. The California Institute of Technology has agreed to refund NASA \$500,000 in overpayments from its (Caltech) FY04’s provisional payment of \$12,500,000. The \$500,000 will be treated as an offset to Caltech’s FY05 Lump Sum amount.

C. Caltech and NASA have negotiated projected Lump Sum costs (excluding legal costs) for Fiscal Years 2005, 2006, 2007, 2008, 2009 and 2010 in the amounts as shown in the below table. **(Mod 46 and Mod 54)**

1. Pursuant to the provisions of Clause B-5 (c) (2) of Contract NAS7-03001, lump sum costs to be provisionally paid each year (FY 2005 through FY2010) will be composed of 1) a negotiated fixed amount for all lump sum costs (exclusive of legal costs), and 2) a provisionally paid lump sum amount for legal costs. The provisionally paid amount for legal costs will be based on the prior year’s finalized actual legal costs. At the close of each year, an adjustment will be made to the provisionally paid legal costs in order to account for actual legal costs based on the procedure set forth in paragraph 2. below, and through this process a final lump sum for the fiscal year will be established. Any refunds or additions applicable to legal costs based on the year-end adjustment will be credited or debited to the next years provisionally paid lump sum costs. Year-end legal costs will be subject to Government based audits.

2. Legal costs will be determined by accumulating all allowable costs for the Office of General Counsel and in addition, adding OGC’s salaries and benefits multiplied by a Lump Sum Facilities and Administration (LSFAC) rate of 69.01%. This total will then multiplied by the proportion of JPL headcount to total headcount of JPL and Campus.

3. The contents of this modification is *not* intended to change the rights and responsibilities of the parties under the existing provisions of Contract NAS7-03001 as it pertains to such areas as cost allowability, inspection, audit, litigation management and access to records. All other terms of the contract remain the same.

4. Actual Lump Sum Amounts

YEAR	Lump Sum Costs (1,000s)
2004	\$12,000
2005	\$12,278
2006	\$12,377
2007	\$14,016 (Mod 54)
2008	\$13,250 (Mod 60)
2009	\$15,515 (Mod 72)
2010	\$13,164 (Mod 80)

Provisional FY11 Lump Sum costs are established at \$15,886,000, which excludes the 3% escalation factor **(Mod 80)**

(d) Discretionary Research Funds. The discretionary research funds are as follows:

(1) Director's Research & Development Fund (DRDF). In addition to funding otherwise made available to the Contractor for the performance of work under this Contract, the Contracting Officer shall, by separate task order, make available to the Contractor funding for use in the performance of discretionary research and development. This additional funding shall be used at the discretion of the Laboratory Director to fund multi-year research and technology efforts in collaboration with universities, other NASA centers, government laboratories, and industry. These efforts will fall within JPL's purpose and mission or special competencies and shall be known collectively as the "Director's Research and Development Fund". The amount to be provided each year based upon NASA-sponsored work for the Director's Research & Development Fund shall be \$4,000,000. In addition, the Contractor will provide the JPL Director with discretionary research funds in the amount of \$500,000 annually. These amounts will be periodically reviewed by the NASA Associate Administrator for Space Science and the JPL Director to ensure a stable and appropriate level of high quality research and development at JPL. An appropriate amount will also be provided by non-NASA sponsors based upon work performed for them under Section C-1(b).

(2) Research and Technology Development Program. The parties agree that the Contractor may, in addition to the discretionary research set forth in paragraph (d) above, carry out Research and Technology Development (R&TD) projects. The Contractor's R&TD Program will annually fund in-house research and technology efforts. The Contractor's R&TD projects will fall within the purpose and mission of JPL as an FFRDC as defined in C-1(a) of this Contract, and be conducted pursuant to the policies and procedures approved by the NMO Procurement Officer. The Contractor shall obtain the NMO Procurement Officer's approval that all R&TD program projects fall within the purpose and mission of JPL as an FFRDC. The cost of the Contractor's R&TD projects shall be allocated through the general pool of the Contractor's allocated direct cost structure. The total annual budget for R&TD projects shall not exceed three percent (3%) of the Contractor's projected Modified Total Cost base at the beginning of each fiscal year.

(e) Other Advance Understandings. Allowable costs shall also include the items of cost listed in subparagraphs (1) through (10) below. Reimbursement of such costs shall be subject to the requirement that any such costs be reasonable in amount and allocable under applicable cost principles identified in Section B-5(a), above.

(1) Anticipatory Costs. The parties agree that costs shall be allowable if incurred by the Contractor in anticipation of (i) this Contract, or (ii) a subsequently executed task order or task order amendment there under, which, if incurred after the execution thereof, would have been allowable items of cost. When the Contractor's management decides to incur costs prior to the execution of a task order or task order amendment pursuant to this subparagraph (1), the Contractor will simultaneously notify the Contracting Officer in writing.

(2) Public Information and Outreach. In order to assist NASA in the implementation of its mandate under the National Aeronautics and Space Administration Act of 1958, as amended (the "Space Act"), the Contractor will distribute and otherwise make information about NASA programs and accomplishments and about space and science developments freely available to the public. Costs for Government program-related printed, electronic (e.g., Internet) or other distributable

information, displays or exhibits, media access, mailings, photographs, memorabilia, audio or video recordings, approved collections of information from the public, or other related expenses incurred by the Contractor to interact with and inform the public about space, science and technology developments for public events, activities marking accomplishments under this Contract, or educational outreach shall be allowable.

(3) Patent Infringement Litigation Costs. Costs of legal, accounting and other services, and related costs, incurred in connection with the defense of patent infringement litigation based on the performance of this Contract, of Contracts NAS7-1407, NAS7-1260, NAS7-918, NAS7-920(F), NAS7-100, or of NAS7-270(F), shall be allowable, provided the Contractor has complied with the requirements of FAR 52.227-2, Notice and Assistance Regarding Patent and Copyright Infringement, of this Contract, or of a similar provision in Contract(s) NAS7-1407, NAS7-1260, NAS7-918, NAS7-920(F), NAS7-100 or NAS7-270(F), with respect to such litigation.

(4) Technology Transfer Activities. In furtherance of NASA's policy objective of encouraging technology transfer, costs incurred in promoting and facilitating U.S. public and private sector technology transfer consistent with the requirements of this Contract shall be allowable.

(5) Facilities Rearrangement and Alteration Costs. Costs incurred in special facilities modification or rearrangement shall be allowable where performed in accordance with the terms of this Contract (including any task order issued expressly therefore).

(6) Terminal Costs. In the event the Contract is terminated by the government for convenience or expires, the parties will engage in good faith negotiations to reach agreement on a settlement of costs associated with such termination or expiration, as dictated by the circumstances. For purposes of this clause, the parties acknowledge that any settlement reached in connection with a termination for convenience or Contract expiration will be referred to as the "termination settlement". The following cost types will be considered allowable cost types under a termination or expiration. These costs are illustrative of the types of allowable costs and are not intended to be all-inclusive.

(i) The Government agrees that it is reasonable for the Contractor to acquire necessary supplies and services on the assumption that the Contract will be renewed or extended. Unless the Government notifies the Contractor that the Contract will not be renewed or extended, the Government will not object to a termination, phase-down, or closeout inventory, reasonable when acquired, on the basis that the inventory is excess to the requirements of the performance of the work under contract for the term during which the inventory was acquired.

(ii) The termination settlement shall include an amount, to be determined on an actuarial basis, to compensate the Contractor for the allocable portion of future health and life insurance premiums for employees of the Contractor vested for retirement or retiring during the term of this Contract or of the preceding Contract NAS7-1407, Contract NAS7-1260, Contract NAS7-918, Contract NAS7-920(F), Contract NAS7-100, Contract NAS7-270(F), or NASW-6 or retired upon or as a result of the termination of this Contract, to the extent that such employees' qualifications for such health and life insurance benefits were based on their service in performing work under this Contract, Contract NAS7-1407, Contract NAS7-1260, Contract NAS7-918, Contract NAS7-920(F), Contract NAS7-100, Contract NAS7-270(F), or NASW-6.

(iii) Except as otherwise restricted by H-33(e)(6), the termination settlement shall include an allocable portion of terminal leave benefit payments (including, but not limited to accrued vacation time, severance, unused sick leave, and otherwise unfunded early retirement

costs and pension obligations) made or owed to terminated and retired employees and employees who will be terminated or retired in the future to the extent that such employees' entitlements were based on their service in performing work under this Contract, Contract NAS7-1407, Contract NAS7-1260, Contract NAS7-918, Contract NAS7-920(F), Contract NAS7-100, Contract NAS7-270(F), or Contract NASW-6.

(iv) The termination settlement shall include an amount equal to the cost that it is estimated the Contractor will incur subsequent to termination in discharging its obligations under the provisions and clauses of this contract which require retention of Contractor records.

(v) The termination settlement shall include a provisional amount equal to the estimated cost of benefits which the Contractor will be required to pay into any state unemployment fund subsequent to the termination for convenience of this Contract, based on compensation paid to employees in the performance of this Contract, Contract NAS7-1407, Contract NAS7-1260, Contract NAS7-918, Contract NAS7-920(F), Contract NAS7-100, Contract NAS7-270(F), or Contract NASW-6. The provisional amount will be adjusted to reflect the actual amount of payments made into such unemployment funds, as soon as the actual amount of payments can be finally determined under applicable state and federal law. This understanding is based on the fact that the Contractor has elected to finance its liability for unemployment compensation and related benefits on a cost-of-benefits basis.

(vi) The termination settlement shall include a provisional amount equal to the estimated cost of workers' compensation and employer's liability benefits (including benefits under the Longshoremen's and Harbor Workers' Compensation Act) which the Contractor will be obligated to pay over to the State Compensation Insurance Fund of the State of California, or to any other state compensation or employer's liability carrier, subsequent to the termination for convenience of this Contract, based on injuries or death resulting from such injuries sustained in the performance of this Contract, Contract NAS7-1407, Contract NAS7-1260, Contract NAS7-918, Contract NAS7-920(F), Contract NAS7-100, Contract NAS7-270(F), or Contract NASW-6. This provisional amount will be adjusted to reflect the actual amount of payments made to such fund or carrier, as soon as the actual amount of payments can be finally determined under the provisions of the applicable insurance contract or applicable state or federal law.

(7) Treatment of CERCLA Environmental Costs. NASA has designated both the Department of the Army and the California Institute of Technology (Contractor) as potentially responsible parties (PRP) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended by 42 U.S.C. §9601 (et seq.) for purposes of allocating the cost of responding to JPL CERCLA contamination. In 1992, the facility known as JPL was placed on the National Priorities List of Superfund sites. The designation of PRP was made in accordance with the CERCLA. This clause shall govern the extent to which the Contractor can charge its CERCLA environmental costs as a PRP to this Contract. This clause does not recognize or create any Government liability for the Contractor's PRP CERCLA liability in the absence of a contract between the Contractor and NASA to operate JPL as an FFRDC. Additionally, this clause does not create or constitute an admission of liability by the Contractor. The parties agree that, at a minimum, any allowable costs flowing from PRP CERCLA liability

associated with the Contractor's business organization referred to as JPL can be treated as an allocated direct cost (ADC) to this Contract. To the extent a cost arises from environmental wrongdoing, as defined in the DCAA manual, NASA shall not consider it an allowable cost under this Contract. The Contractor specifically reserves the right to contest determinations of allowability, including the appropriateness and/or application of the DCAA standard of environmental wrongdoing, pursuant to the Disputes provision of this Contract. Any other PRP liability apportioned to the California Institute of Technology (Caltech) which constitutes an allowable cost can be treated as an institutional F&A cost. Additionally, Caltech agrees, when cost effective, to pursue any insurance claims relative to its liability under CERCLA as a PRP. The parties agree that insurance proceeds that the California Institute of Technology receives as reimbursement for CERCLA liability shall be applied as a credit against CERCLA environmental costs which were or would be otherwise allowable under this Contract.

(8) Caltech Faculty Consulting Costs. In addition to work performed by Caltech faculty for JPL under interdivisional transfers issued to the Contractor's campus by JPL, Caltech faculty may be utilized by JPL as consultants only if the needs of the Laboratory cannot be met by JPL staff or more cost effective sources.

(i) Caltech faculty will be used sparingly by JPL as consultants and the circumstances of their engagement will normally meet each of the conditions set forth below:

(A) The consultant(s) are especially qualified by education or by experience to perform some specialized service in a particular field.

(B) The specialized service to be performed is the provision of advice to JPL management, typically in a technical area.

(C) The consultant(s) contribute their knowledge but normally do not physically perform the work involved.

(D) The consultant(s) are retained as problem solvers since their expertise allows them to recommend solutions when it is not economical or prudent for JPL to work out the solutions.

(E) The consultant(s) do not supervise or perform operating functions.

(ii) Individual Caltech faculty may provide consulting services to JPL for a maximum of 48 workdays per Caltech fiscal year, in accordance with (i) above and Caltech policy, unless other arrangements are approved in advance by the Contracting Officer.

(iii) Caltech faculty engaged by JPL as consultants shall be compensated for such services on a daily basis at a rate equal to 100 percent of their daily campus salary unless a greater amount is approved in advance by the NMO Procurement Officer. In addition to their compensation, Caltech faculty engaged by JPL as consultants will be reimbursed for allowable

transportation, subsistence and other costs necessary for performing the consulting assignment. Transportation between the Campus and JPL will not be reimbursed.

(iv) To the extent that foreign travel is involved, approval is required in accordance with Attachment A.

(9) Litigation Costs. This advance agreement only applies to certain litigation costs the Contractor incurs when it fails to prevail in court or at an administrative board. Specifically, the parties agree that when the Contractor litigates a third party suit and a court or an administrative board finds that the Contractor violated Federal law, the Contractor's legal cost and judgment costs will be allowable only when the Contractor can demonstrate it had a reasonable expectation of prevailing on the merits. The test regarding "reasonable expectation of prevailing" is whether (1) there was a reasonable basis for the facts asserted; (2) there was a reasonable basis for the theory of law advanced; and (3) there was factual support for the legal theory. Additionally, this advance agreement does not alter the requirement that costs also must be reasonable and allocable.

(10) Other Cost Agreements. The NMO Procurement Officer may also approve other advance agreements with the Contractor regarding the allowability of particular types of cost.

Add Item 11:

(11) Intergovernmental Personnel Act (IPA)

(i) The Contractor may be requested by NASA or non-NASA sponsors to provide temporary assignment of IPL employees in accordance with the Intergovernmental Personnel Act (IPA). Such temporary assignments shall be provided under separate IPA agreements rather than this contract. The negotiation of such IPA will include the costs of JPL employee's direct labor cost, employee benefits and other direct costs (e.g., travel) while on temporary assignment. These costs shall be reimbursed under such IPA agreements and not this contract.

(ii) The costs associated with negotiating, managing and providing administrative support to such JPL employees temporarily assigned under an IPA Agreement are not in the nature of personal services. These costs shall therefore be reimbursed under the terms of this contract and not the individual IPA Agreements. Accounting review disclosed that IPA costs have a causal beneficial relationship with applicable allocated direct costs.

(iii) IPA agreements with non-NASA sponsors shall be subject to NASA approval.

(iv) Pursuant to the concept of a single cost objective, the contracting parties have agreed to the exclusion of IPA costs from allocated direct costs. The parties have agreed to this cost accounting variance due to the immateriality of the IPA costs and the potential significant efforts associated with changing the existing cost accounting system. To allow for continuing cost monitoring by the NASA Management Office (NMO), the Contractor shall submit an annual cost report detailing incurred IPA costs, in order for the Government to reassess the materiality of the costs. **(Modification 12)**

Add Item 12:

(12) Regarding the allowability of interest payments by JPL to its subcontractor, Honeywell Building Solutions -SES, under subcontract number 1273095 and any follow-on subcontract for the same work, the Government has properly executed an approval to deviate from Federal Acquisition Regulation (FAR) subparts 31.205-20, Interest and Other Financial Costs and 31.109(c), Advance Agreements. All such payments are allowable costs under this Contract NAS7-03001, and any follow-on Contract to NAS7-03001 between Caltech and the Government. (**Modification 35**)

B-6 CONTRACTOR FINANCING BY LETTER OF CREDIT (LOC)

- (a) Background. The following procedures and practices will apply to the use of the LOC method of advance payment in this Contract. A new LOC will be initiated concurrent with the start of this Contract.
- (b) General. Funds will be advanced through the Department of Health and Human Services - Payment Management System (DHHS/PMS) as set forth in Appendix 9280-2A of the NASA Financial Management Manual (FMM). In addition, any funds provided by the LOC to the Contractor for advance payments shall be maintained in interest bearing accounts until such funds are expended by the Contractor. Interest earned on advances in excess of \$250 per year will be remitted monthly to the Department of Health and Human Services (HHS) with a concurrent notice to the Contracting Officer. A reasonable proration of interest earned on individual letters of credits will be reported to NASA.
- (c) Amount. In accordance with those procedures, a LOC will be issued in an amount determined by the Contracting Officer based upon the needs of the Contractor. Subsequent amendments to the LOC will be based upon (1) Contracting Officer approval and (2) amendments to the Contract.
- (d) Reconciliation. The Contractor shall provide a reconciliation of expenditures to LOC draws on a monthly basis to the Contracting Officer and the NASA Goddard Space Flight Center (GSFC) Regional Finance Office (RFO). Specific processes that outline the procedures used to manage the new LOC will be documented and provided to the Contracting Officer no later than sixty days after the Contract's effective date. A separate reconciliation will continue to be required for the predecessor contract, NAS7-1407.

Advance Payments to Subcontractors.

(1) The Contractor shall not use funds provided by the LOC to make advance payments to its subcontractors, other than commercial advance payments in accordance with FAR 32.2 or those described in item (2) below, without the approval of the Contracting Officer.

(2) The Contractor may provide advance payments in the following instances, but only where such payments are common practice in the industry and are required by the vendor for all customers: subscriptions to periodicals; conference sponsorship/registration fees; purchase of office equipment; rentals/leases of commercial equipment; and software maintenance agreements. Commercial subcontractors shall not be paid advance payments greater than 15% of the subcontract price.

(3) When advance notice or written consent is required by the terms of Clause I-5, Subcontracts (FAR 52.244-2) (Aug 1998), (Alternate I) (Aug 1998) (Deviation), the Contractor shall not use advance payments for non-commercial items until such advance notification has been provided and written subcontract consent has been received.

B-7 FIXED FEE

In addition to allowable costs reimbursed per the provisions of the Contract, the Contractor shall be paid a fixed fee for its performance thereof in the amount of \$20,020,000.00 annually. One-quarter of this amount, \$5,005,000.00, shall be disbursed by NASA to the Contractor quarterly, through the end of the Contract. Each quarterly payment shall be made no later than 30 days after the end of each quarter, with the first quarterly payment for October 1, 2010 – December 31, 2010, due for payment within 30 days after the execution of the Modification incorporating Article B-7. If the final Contract fee payment period is less than a full quarter, the \$5,005,000.00 quarterly fixed fee amount shall be prorated and paid to the Contractor accordingly, no later than 30 days after the end of the Contract term. **(Modification 77)**

B-8, FORCE AND EFFECT OF AWARD FEE REFERENCES THROUGHOUT THIS CONTRACT

All references to Award Fee, Award Term, and the Award Fee evaluation process throughout the Contract ceased to be in effect as of October 1, 2010. **(Modification 77)**

B-9 CONTRACTOR EVALUATION

To be Negotiated **(Modification 77)**

[END OF SECTION]

SECTION C - DESCRIPTION/SPECIFICATION/WORK STATEMENT

C-1 DESCRIPTION OF WORK

(a) NASA-Sponsored Work. The Contractor shall perform such work as is designated in unilateral task orders issued by the Contracting Officer. The effort under these task orders shall be within the purpose and mission of JPL as an FFRDC that are defined as follows:

(1) Explore the solar system including earth-based investigations and operations related thereto. JPL's primary mission in support of the Space Science Enterprise is planetary science and exploration. JPL has also been designated as NASA's Center of Excellence for Deep Space Systems. JPL will have major responsibilities as well in support of NASA's applications, astrophysics, earth sciences, and such other high science value programs as may be established. Instrument observations from space vehicles will be a primary tool for such explorations, investigations and science programs, supported by ground-based research and laboratory experiments for such work, and for work described in C-1(a)(2) below. JPL will support Space Science Enterprise in its mission as stated in the NASA Strategic Plan.

(2) Carry out investigations and conduct studies to support NASA missions in the field of earth sciences including research into interactions of earth's oceans, atmosphere, continents, and effects of solar energy in order to gain an integrated understanding of the total earth system. JPL may undertake mission assignments related to: (a) autonomous deep-space and earth-orbiting spacecraft or major subsystems, (b) experiments, instruments, or other devices which may be carried as payload on the space shuttle or space stations, in other spacecraft or in such missions managed by others, and/or (c) ground-based systems. Implicit in mission assignments is a broad range of hardware and software engineering, scientific analysis, and management effort.

(3) Carry out investigations and conduct studies in the fields of Astrophysics and Astrobiology. JPL will undertake mission assignments that may involve (i) autonomous deep-space and earth-orbiting spacecraft or major subsystems, (ii) experiments, instruments, or other devices which may be carried as payload on the space shuttle or space stations, in other spacecraft or in such missions managed by others, and/or (iii) ground-based systems. Implicit in mission assignments is a broad range of hardware and software engineering, scientific analysis, and management effort.

(4) Carry out development of fundamental technologies to enable new aerospace system concepts, science measurement capabilities, and engineering processes for the following Aerospace Technology Enterprise programs:

- (i) Enabling Concepts and Technology
- (ii) Computing, Information, and Communications Technology
- (iii) Engineering for Complex Systems

(5) Conduct (i) a program of supporting research and (ii) a program of advanced technical development, designed to make contributions to space science, and space exploration.

JPL will undertake research and technology development for NASA in both principal and supporting roles to enable effective project implementation and to further technological capabilities for future NASA requirements.

(6) Conduct activities in support of commercial technology partnerships as part of the NASA Commercial Technology Program. In keeping with programmatic direction, such efforts undertaken by the Contractor, which include technology transfer, partnering and commercialization activities, shall seek to enhance the value and contribution of technology developed under the Contract to NASA enterprises and mission programs, the nation's technological competitiveness and prosperity, quality of life, and other national priorities.

(7) JPL, as directed by the Contracting Officer, is responsible for the operation, research, technology insertion, and management of NASA's Deep Space Network to provide telecommunications and operations services including data acquisition and data delivery required to meet established agency objectives.

(8) Assist NASA in the formulation and execution of its programs by providing NASA with technical advice, studies, and reports of investigations.

(9) Assist NASA in conducting education programs and activities in accordance with Attachment E.

(10) Carry out investigations and conducting studies for advancing the state of the art of C-1(a)(1) through (7) above that are needed for future work for NASA. These studies may lead to future special competencies of the Contractor. Where any activity under this C-1(a)(10) is contemplated, it shall be specifically noted in the task plan.

(11) Provide monitoring on Small Business Innovation Research (SBIR) Program contracts. This will include assessment of the proposed capability and any required resources (e.g. equipment, facilities) of SBIR contractors for the proposed research. Provide visibility, communicate SBIR technologies with Contractor technical division competencies and facilitate follow-on Contractor/NASA application(s).

JPL will supply an appropriately broad base of scientific and technical capabilities relevant and available to NASA program responsibilities and assignments, and will maintain professional staff capabilities at the highest possible level to derive as much as possible from the actual performance of research and development work under this Contract.

Toward this end, JPL will use crosscutting processes as described in the NASA Strategic Plan in support of NASA's programs.

Each new or amended task order will include a reference to one or more appropriate subparagraphs of C-1(a).

The Contractor may be directed to perform work, (such as program management and strategic planning), which has the potential to encompass activities that are inherently governmental functions. It is not the intent of NASA to require the Contractor to perform inherently governmental functions. The Contractor shall not knowingly propose, and the Government shall

not knowingly request, any work that constitutes an inherently governmental function, including any function listed in Attachment A to Office of Federal Procurement Policy (OFPP) Policy Letter 92-1. The parties acknowledge the necessity for appropriate internal controls and management attention at both NASA and JPL for this purpose.

(12) ___The Contractor, when and as directed by the Contracting Officer, may perform fundamental research under this contract. Such research is understood to mean basic and applied research in science and engineering conducted at an accredited institution of higher learning in the United States where the resulting information is ordinarily published and shared broadly within the scientific community. No restrictions may be placed upon the conduct or reporting of federally-funded research that has not received national security classification, except as provided in applicable U.S. Statutes. The Contractor may publish, release or otherwise disseminate data produced during the performance of task orders designated as fundamental research, including the final report, without prior review by NASA for export control or national security purposes. Notwithstanding the foregoing, the Contractor shall perform its responsibilities under Section C-1 (e) (8).

Additionally, the Contractor is responsible for the reviewing of any publication, release or dissemination of the data for conformance with other restrictions expressly set forth in the Contract, and to the extent it receives or is given access to data necessary for the performance of the Contract which contains restrictive markings, for compliance with such restrictive markings. Nothing in this modification shall change the Contractor's obligations under Section H-37 SECURITY, including but not limited to restricting and monitoring access of foreign nationals to the JPL facility.

Nothing in this modification creates any vested rights in the Contractor to perform fundamental research at JPL. NASA may unilaterally rescind authorization for the Contractor to engage in fundamental research, at any time. **(Modification No. 53)**

(b) Work for Non-NASA Sponsors. The Contractor may perform work for non-NASA sponsors, which falls within paragraphs C-1(a)(1) through (10) above, or which makes use of its special competencies and which is designated in task orders issued by the Contracting Officer based on task plans initiated by the Contractor pursuant to G-6(f)(1).

(1) Each new or amended task order will include a reference to one or more appropriate subparagraphs of C-1(a) or the special competency of JPL being utilized to perform the effort.

(2) The Contractor shall not seek to compete for or perform work for non-NASA sponsors unless the non-NASA sponsor is willing to accept proposals from FFRDC's.

(3) In no event will JPL compete with any non FFRDC entity in response to a Federal Agency request for proposal for other than the operation of an FFRDC nor shall JPL submit unsolicited proposals for work which is otherwise available from the private sector or which would place JPL in direct competition with domestic private industry.

(Modification No. 29)

Add paragraph (4) as follows:

(4) NASA may enter into a Space Act Agreement with a Non-NASA Sponsor and

issue a Task Order to Contractor to perform work to support the Space Act Agreement. To facilitate technology transfer in support of individual Space Act Agreements, Contractor grants NASA the right to grant the Non-NASA Sponsor a non-transferable, royalty-free, non-exclusive, non-commercial, internal use license to data, software or patentable inventions developed by Contractor in performance of the NASA Task Order issued to support the Space Act Agreement. Such license should not be construed as a waiver of any rights afforded to Contractor under Contract NAS7-0300, including rights granted under G-13, H-38, H-39, FAR 52.227-11, 52.227-14, or 52.227-16. Should the Non-NASA Sponsor request rights greater than those NASA may grant under this provision or should the Non-NASA Sponsor require a license to use pre-existing Contractor data, software or inventions, NASA should direct the Non-NASA Sponsor to the Contractor's Office of Technology Transfer which has the rights to issue such licenses on behalf of the Contractor. **(Modification No. 29)**

(c) Related Facilities Work.

(1) Task Order Funded Facilities Projects. The Contractor may be directed by task orders issued by the Contracting Officer and funded by special funds of the Government for such purposes and designated as Construction of Facilities (C of F) funds, to construct, restore, remove, relocate, maintain, install, or alter existing facilities provided by paragraph (b) of Clause C-2 (Resources for Performance of the Contract), below. The Contractor is authorized with Contracting Officer approval, to construct and install, whether with Contractor's in-house staff or through subcontracts, certain other buildings, premises, and facilities for the Contractor's use in the performance of any work under this Contract. The Contractor may also obtain by subcontract or provide with its own personnel, design, architectural and engineering services for facilities to be furnished by the Government under this Contract.

(2) Related Facilities Acquisition and Management. For facilities acquisition and management work other than that authorized under C-1(c)(1) above, the Contractor shall, either with Contractor's in-house staff or through subcontracts, provide design, architectural and engineering services, and/or construct, acquire, restore, remove, relocate, maintain, install, or alter facilities furnished or acquired under this Contract, and may appropriately remove or dispose of, the equipment, facilities, buildings, premises, space and accommodations acquired, obtained, constructed, installed or held pursuant to paragraphs (1) or (2) of this paragraph C-1(c) or pursuant to other provisions in this Contract.

(d) Technical Direction and Guidance. Technical direction shall be provided in accordance with NFS Clause 1852.242-70, Technical Direction. Technical monitors may also be designated by NASA for specific tasks placed under the Contract. Only the Contracting Officer can direct changes to the task order. With respect to the overall conduct of the work to be performed, the Contractor shall be responsive to the Associate Administrator of the Office of Space Science or his designee.

(e) General Reports. The Contractor will furnish in whatever format required by NASA such managerial, financial, technical, progress, and other reports as the Contracting Officer determines to

be necessary to reflect adequately the activities carried on under this Contract and will make such external distribution thereof as the Contracting Officer directs.

(1) Scientific and Technical Reports. Subject to Federal laws and regulations, and the terms of this Contract, the Contractor may also initiate, prepare and distribute to persons in the scientific and technical communities unclassified-unlimited (as appropriate) reports in the fields of aeronautics and space science, and related engineering, and in the fields of advanced research and technology, when, in its judgment, such distribution will effectuate the purposes of this Contract or is desirable in order to disseminate scientific and technical knowledge and information; provided, the format of such reports, their review, and their distribution are in accordance with the Government's format specifications (as modified by paragraph (e)(8) below), and the Contractor's review and distribution policies which have been approved by the Contracting Officer. All such reports shall carry appropriate statements, as required by Federal law and regulations, such as those that state that the work is funded by NASA or the appropriate reimbursable sponsor.

(2) Public Reports. Reports prepared primarily for members of the public generally, such as general educational and public information reports, shall be subject to the provisions of Clause H-11, (Public Affairs Program and Release of Information to the Public).

(3) Distribution Control. The Contracting Officer may require the Contractor to cease the external distribution under this Contract, of any reports within a regular or report series, or of any individual report, and any work in connection with such external distribution. However, in such event the Contractor shall remain free to publish, at the Contractor's own expense, any information or data contained in such report(s), subject to any limitations contained in any other provisions of this Contract, in bilaterally accepted task orders, or in the laws or regulations of the United States.

(4) NASA Publications. NASA may elect to publish in its own media and formats any of the information contained in reports prepared by the Contractor. When in the judgment of the program Associate Administrator or his designee, information in any such reports should also be published in NASA media and format, the Contractor will make such revisions as are requested, to conform the reports to NASA requirements. Copies of all reports within subparagraph C-1(e)(2) hereof prepared by the Contractor shall be forwarded to the program Associate Administrator as soon as possible after preparation.

(5) Contractor Distribution. Nothing herein shall be deemed to restrict the right of the Contractor to initiate, prepare and distribute to its own personnel, its present or potential subcontractors, and to NASA personnel such reports as it may deem necessary or desirable for the performance of work under this Contract, subject to Federal laws and regulations, including U.S. export laws and regulations.

(6) External Distribution. The term "external distribution", as used in this paragraph C-1(e), means any distribution except distribution to the Contractor's own personnel, to present and prospective subcontractors of the Contractor, and to NASA personnel. The term "distributed externally" has a like meaning.

(7) Overrun Reports. The Contractor shall submit electronically the status of task orders where expenditures exceed funds allotted by greater than \$1,000 and the Contractor's plan of action on each such task order.

(8) NASA Scientific and Technical Information (STI) Database. The Contractor shall submit to NASA, for inclusion in the STI Database, copies of all final, formal published reports prepared for NASA funded or sponsored science, technology, research and development, and space flight projects. Report copies shall be submitted pursuant to the specifications for STI in NFS 1852.235-70. The Contractor shall assume responsibility for reviewing, approving, and correctly marking all documents, including those for export controlled or limited or restricted STI, pursuant to existing U.S. laws and regulations. No external distribution of such STI may be made prior to such review and marking. The Contractor shall either use NASA Form 1676, "NASA Scientific and Technical Document Availability Authorization", or shall assume responsibility to ensure that JPL Form 1330-S is approved by NASA Headquarters Code I so that the document markings are consistent and understandable between NASA and the Contractor. The cover pages for reports shall conform to the format requirements specified in Appendix Four of NPG 2200.2A, and shall contain appropriate reference to NASA. The Contractor shall also include with each such submission to NASA a completed OMB Standard Form 298, Report Documentation Page and a copy of either the NASA Form (NF) 1676 or JPL Form 1330-S, showing approval to disseminate and appropriate release requirements. The Contractor shall ensure that the following requirements are met for NASA funded or sponsored work that is performed on subcontracts. The subcontractor's final published report shall (1) indicate that the work is funded by NASA, (2) be formatted in accordance with NPG 2200.2A, (3) be correctly marked to ensure appropriate dissemination, and (4) be forwarded to the Contractor. The Contractor shall submit the subcontractor's final report to the NASA Contracting Officer.

(9) Safety and Health.

(i) The Contractor shall submit a safety and health plan no later than 90 days prior to the beginning of the Contract term that will be approved or disapproved by the Contracting Officer. The Contractor shall provide annual updates. The Plan shall include a requirement that quarterly reports be provided in accordance with paragraph (d) of NFS 1852.223-70, Safety and Health.

(ii) The Contractor shall provide to the Contracting Officer a listing of the types of hazardous operations being performed under this Contract within 60 days after Contract award. JPL will maintain updates to such listing and will provide these updates to the Contracting Officer. Detailed documentation Operational Safety Reviews (OSRs) of potential hazardous operations shall be retained on file at JPL and will be made available upon Contracting Officer request. The parties agree that the reporting requirements of paragraphs (i) and (ii) satisfy the Contractor's obligations under paragraph (j) of NFS 1852.223-70, Safety and Health.

(10) Information Exchange with NMO. In order to enable the NMO to interface more effectively with JPL program offices, the Director of the NMO and the Contracting Officer shall be notified of, and invited to attend regular Program Management Reviews. In addition the Contractor shall present to the Director of the NMO and the Contracting Officer a semi-annual review of major proposals (NASA and non-NASA) and planned new starts.

(11) Workforce Reports. The Contractor shall, by the 90th day after expiration of the yearly Affirmative Action Plan (AAP), provide to NASA Headquarters Code E the following:

(i) A copy of the new Affirmative Action Plan, including the section containing a review of the results of actions taken during the previous Affirmative Action Plan year.

(ii) A copy of the workforce analysis, prepared in accordance with 41 CFR 60-2.11(b).

(12) Caltech Transfers. The Contractor shall submit a quarterly report to the Contracting Officer describing the tasks being performed at JPL under Caltech Transfers, in a format to be approved by the Contracting Officer.

(13) New Technology Reporting. The requirements of the New Technology Reporting Clause of this Contract are further defined as follows:

(i) All New Technology Reports, inventions, disclosures, patent applications, requests for waivers, and intellectual property licenses year-end data shall be entered no later than 30 days following the end of the Fiscal Year.

(ii) NASA TechTracS.

(A) The Contractor shall enter all available data on a monthly basis to the NASATechTracS database (not later than the fifteenth of the month for which the data pertains) in support of Federal Agency reporting requirements under section 11 of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710) as well as in support of metrics outlined in NPG 7500.1, NASA Technology Commercialization Process. These data shall include, but are not limited to, information regarding: subject inventions including software (FAR clause 52.227-11 as modified by NASA FAR Supplement clause 1852.227-11); decision on election of title to subject inventions; patent applications filed on subject inventions, patents issued on subject inventions, copyrights asserted on subject inventions (software); copyright and patent licenses executed and royalties received for subject inventions; sub-contracts issued under this Contract; partnerships established; private entity contributions to each partnership (e.g., funds applied and/or dollar value of personnel, facilities or equipment, etc.); and success stories identified during the period.

(B) The Contractor shall ensure that data associated with each reportable item (e.g. NASA tracking number, innovator names, subject title, subsequent patent filing, and licensing information, subsequent copyright licensing information) is timely entered into the NASA TechTracS database. The Contracting Officer may provide the Contractor additional guidance from time to time as necessary.

C-2 RESOURCES FOR PERFORMANCE OF THE CONTRACT

(a) The Contractor shall provide, either directly or through subcontract, the management, scientific, engineering, technical and other personnel, labor and services necessary to perform all work required under this Contract.

(b) Either directly or through acquisition by the Contractor as provided under this Contract, the Government shall provide, on a rent-free basis, all property as defined in FAR 45.101(a) and NFS 1845.301, which is required for the performance of such work. The property which the Government will provide for the Contractor's use in the performance of the Contract work includes the Government-owned facilities, including, but not by way of limitation, the land, buildings and improvements located at 4800 Oak Grove Drive, Pasadena, California, which are generally referred to as "JPL"; the Government-owned facilities at Goldstone Deep Space Communications Complex; and Table Mountain; and all other facilities heretofore made available by the Government for use by the Contractor in the performance of this Contract (including overseas tracking and data acquisition facilities as allowed by the terms of the separate NASA international agreement(s) or contract(s) for which there is a current or anticipated use requirement under this Contract. Any resources no longer required by the Contractor will be identified to the Contracting Officer.

(c) Except as otherwise directed by the Contracting Officer or otherwise provided for under this Contract or otherwise required to be obtained by the government, the Contractor shall procure all necessary permits or licenses required for the performance of work under this Contract. With regard to copyrighted material, the Contractor shall ensure that any copyright license required in order to perform work under this Contract shall provide that the license is freely transferable to any successor-in-interest of the Contractor, a successor Contractor to operate JPL, or the Government.

C-3 USE OF OTHER FACILITIES AND LOCATIONS

(a) The Contractor shall, to the maximum extent practicable, use the facilities provided to the Contractor under paragraph C-2(b) in performing work under this Contract. The Contractor is not precluded, however, from:

(1) using other facilities or performing work at other locations when in its judgment such a course will be more practical or economical; or

(2) subcontracting work in accordance with the applicable provisions of this Contract.

(b) Prior to leasing facilities for use under this Contract, the Contractor shall obtain the Contracting Officer's approval.

(c) The Contractor shall not occupy space that is leased by a subcontractor, other than in exceptional circumstances approved by the Contracting Officer or in specific instances where a limited number of Contractor employees are authorized by the Contractor to occupy such space for the purpose of managing or monitoring the subcontracted effort of that subcontractor.

(d) Contractor shall submit to the Contracting Officer, on a quarterly basis, a report of facilities leased by the Contractor and of specific locations where Contractor employees are occupying space in subcontractor facilities pursuant to paragraph (c) above.

C-4 FACILITIES MANAGEMENT PROVISIONS

(a) Implementation of C of F Funded NASA Minor and Environmental Compliance and Restoration (ECR) Projects. General. In applying life cycle planning principles in managing facilities, the Contractor shall establish and maintain a procedure for coordinating with and in keeping the Contracting Officer informed about facility management matters, including acquisition of facilities planning process described in Clause G-16 (Facilities). The following applies to the implementation of the Construction of Facilities (C of F) Minor Facility Projects designated as Revitalization and Minor Construction, and ECR Projects. Individual task orders shall be written to provide for each fiscal year's funding; with the exception of the Superfund Task Order that may include more than one (1) fiscal year's funds. The task orders will list those projects within each program as shown on the NASA Minor Facilities Projects - Summary Brief Project Document (SBPD) – HQ DIV Form 800 and the approved funding as authorized by related Resources Authority Warrant (NASA Form 506A). For ECR projects, the task orders will list those ECR projects as shown on the Environmental Compliance and Restoration - Summary Brief Project Document (ECR-SBPD) - HQ DIV Form 800ENV and the approved funding as authorized by related Resources Authority Warrant (NASA Form 506A). (Note: Other specific submittals may be required based upon the specific language in the annual call for C of F projects (e.g. EconPAK economic analyses).

(1) Application. Projects implemented under the authority of the SBPD shall conform to the intent and scope set forth in the Facility Project Brief Project Document (NASA Form 1509) as approved by the Director, Facilities Engineering Division or designee. ECR projects implemented under the authority of the ECR-SBPD shall conform with the intent and scope set forth in the project approval document, as approved by the Director, Environmental Management Division and placed on the task order by the Contracting Officer.

(2) Resources. The amount shown as the "Approved Program Plan" on the SBPD or ECR-SBPD indicates the total resources available for projects by related NASA Form 506A. At no time may fiscal obligations exceed this amount.

(3) Project Implementation. The Contractor may implement projects in any order after execution of a task order. The Approved Facility Project Cost Estimate as stated on the SBPD or ECR-SBPD may be increased by up to, but not to exceed, 25 percent for Minor Projects and 10 percent (up to \$150,000) for Environmental Projects provided.

(i) Each of these increases in project cost estimates will be submitted by the Contractor for approval by the NASA Contracting Officer.

(ii) The total of the estimates of all work awarded and any to be awarded to complete an action under consideration does not exceed the amount of the "Approved Program Plan".

(iii) The Facility Project Cost Estimate of any individual Minor Revitalization and any Minor Construction Project does not exceed \$1,500,000.

(iv) The intent and scope of the project remain as indicated on the approved NASA Form 1509.

(4) Project Changes Requiring Headquarters Approval. Any changes in intent or scope, or requiring an increase above the Approved Facility Project Cost Estimate and the introduction of a new, additional, or substitute project will require advance concurrence.

(i) For Minor Projects with a cost estimate increase of more than 25 percent, advance concurrence is required by the cognizant NASA Enterprise and approval by the Director, Facilities Engineering Division, by means of appropriate revised NASA Form 1509 or documents applicable.

(ii) For ECR Projects with a cost estimate increase of 10 percent (or over \$150,000), advance concurrence is required by the cognizant NASA Enterprise and approval by the Director, Environment Management Division by means of appropriate revised NASA Form 1509 or documents applicable.

(5) Reporting. As each project is implemented, commitments, obligations, schedule for completion etc., are to be reported against its assigned Project Number in a format similar to that contained in the Facilities Project Milestone Schedule described in Attachment F to NPG 8820.2C, Facility Project Implementation Handbook, dated April 28, 1999.

(6) Bid Notifications. JPL will provide NASA notification of bids received utilizing NASA Form 1579, Flash Bid Report, for those projects having been approved by NASA Headquarters. Said notice shall be made via facsimile within one working day of bid verification. Notification of bids received is required per NPG 8820.2C, dated April 28, 1999.

(7) JPL shall submit functional area performance metrics for CoF, Facilities Maintenance, Real Property, Space Utilization, and Environment to Code J at Headquarters by November 1 of each year.

(8) The Contractor shall use the criteria, procedures and reporting requirements for "on-going" Construction of Facilities (C of F) projects as set forth in NPG 8820.2C, Facility Project Implementation Handbook, dated April 28, 1999.

(b) NASA Issuances Applicable to Facilities Work. The provisions of the NASA Issuances listed below shall be used for all work performed under paragraph C-1(c). The issuances referenced in this paragraph apply to both Government-owned facilities and facilities leased by the Contractor. Deviations, variations, and exceptions to the documents below can be accommodated and must be approved by the Director, Facilities Engineering Division, NASA Headquarters, through the Contracting Officer.

- (1) NPD 8800.14A, Policy for Real Property Management, dated April 1, 1997
- (2) NPG 8800.15A, Real Estate Management Program Implementation Manual, dated September 1, 1998
- (3) NPD 8820.2, Design and Construction of Facilities, dated December 2, 1998
- (4) NPG 8820.2C, Facilities Project Implementation Handbook, dated April 28, 1999

(5) NPD 8831.1C, Management of Facilities Maintenance, dated May 29, 2002
This issuance is incorporated with the condition that the Contractor is not required to comply with references to the Agency-wide coding structure.

(6) NPG 8831.2D, Facilities Maintenance Management, dated July 25, 2001
This issuance is incorporated with the condition that the Contractor is not required to comply with references to the Agency-wide coding structure.

(7) NPD 8820.3, Facilities Sustainable Design, dated August 21, 2002

(c) Task Orders shall state the Government-specified facilities design characteristics and project management requirements (e.g. NPG 8820.2C), to be observed by the Contractor in connection with the work to be performed under the task orders pursuant to C-1(c) herein.

(d) All new and revised computer aided design (CAD) data for facilities shall be in compliance with the National CAD Standard (NCS) published by the National Institute for Building Sciences (NIBS) at <http://www.nationalcadstandard.org>.

(e) The Contractor shall apply NASA Reliability Centered Maintenance (RCM) principles to meet NASA's Critical Facilities Maintenance Assessment (CFMA) objectives.

C-5 EXCESS AND SURPLUS EQUIPMENT

The Contractor shall, except as otherwise provided for by the Contracting Officer or designee, use the Department of Defense Plant Clearance Automated Reutilization Screening System (PCARSS) for submitting inventory schedules of excess property both onsite and at subcontractor and alternate locations to the NASA NMO Plant Clearance Officer.

C-6 SPECIFIC AGREEMENT ON ORGANIZATIONAL AUTHORITY

(a) The following organizational responsibilities have been specifically agreed to by the parties:

(1) The Contractor's contracts administration function will be under the direction of its Vice President for Business and Finance, and no other Caltech organization unless agreed to pursuant to (c) of this clause.

(2) The JPL Director has full authority, without dollar limitation, to enter into contractual agreements on the behalf of the Contractor, including base operations and other competitive sourcing activities. The JPL Director also has full authority on behalf of Contractor for the acceptance and implementation by JPL of NASA and federal policies (e.g., NPDs and NPGs), release of data to NASA and outside organizations, and all technical and contractual issues associated with the issuance and administration of task orders under the Contract.

(b) The Parties acknowledge that the Contract for operation of JPL is between NASA and Caltech. The JPL Director is the Contractor's authorized representative for Contract implementation.

(c) Any changes to the organizational responsibilities set forth in this clause requires the mutual agreement of the parties.

[END OF SECTION]

SECTION D - PACKAGING AND MARKING

D-1 PACKAGING AND MARKING

Packing, packaging and marking requirements, if applicable, are included in task orders under this Contract.

[END OF SECTION]

SECTION E - INSPECTION AND ACCEPTANCE

E-1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

The following Contract clause pertinent to this section is hereby incorporated by reference:

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.246-10	(APR 1984)	INSPECTION OF FACILITIES

E-2 SAFETY AND MISSION ASSURANCE

(a) NPR 7120.5D, NASA Space Flight Program and Project Management Requirements, dated March 06, 2007, is applicable in accordance with Article G-11 (PROGRAM/PROJECT MANAGEMENT). **(Modification 51)**

(b) It is NASA’s intent that program/project managers consider and implement where appropriate industry best practices related to Safety and Mission Assurance.

(c) The Contractor shall implement safety and mission assurance engineering techniques throughout all phases of the project life cycle deemed important for this support.

(1) The Contractor shall assess, on a project-by-project basis, the level of safety and mission assurance support needed. Safety and mission assurance requirements will be tailored and defined in conjunction with the project for both hardware and software. The tailored safety and mission assurance program will be commensurate with cost, schedule, risk and the technical performance requirements for each project. The safety and mission assurance activity will be documented as a part of the risk management effort to address the specific process for achieving safety and mission success, will be referenced in the task order and will be generated in accordance with NPR 7120.5D. **(Modification 51)**

(d) NPR 8715.6A, "NASA Procedural Requirements for Limiting Orbital Debris with Change 1 -5/14/09," dated May 14, 2009 and NASA Technical Standard (NTS) 8719.14 with Change 4, "Process for Limiting Orbital Debris," approved September 14, 2009, are incorporated into this Contract with the following understandings:

(1) NPR 8715.6A and NTS 8719.14 apply to new Task Orders for the delivery of missions and projects issued after the execution of the modification incorporating these documents (“mod execution”). NPR 8715.6A and NTS 8719.14 also apply after mod execution to ongoing Task Orders for the delivery of missions and projects provided the missions/projects are prior to the NASA Pre-phase-A Mission Concept Review project milestone.

- (2) In NPR 8715.6A paragraph 2.2.2.8, “mission CDR” is substituted for “spacecraft CDR”.
 - (3) All requirements involving passivation measures (including, but not limited to, NPR 8715.6A paragraphs 3.3.1.2 and 3.3.1.5 and NTS 8719.14 paragraphs 4.4.2.1.2, 4.4.4.1.2 and 4.6.2.5) shall be treated as guidelines.
 - (4) NPR 8715.6A, paragraph 3.3.3.4, is not accepted.
 - (5) Using NTS 8719.14 paragraph 4.4.2.1.1 as a guideline, the Contractor shall qualitatively assess the risk of accidental explosions.
 - (6) Using NTS 8719.14 paragraph 4.6.2.4 as a guideline, the Contractor shall qualitatively assess the reliability of post-mission disposal operations in Earth and Lunar orbiters.
 - (7) The term “disposal” shall refer to any post-mission disposal maneuvers, as defined in the NTS 8719.14, Section 3.2, Definitions. Therefore, passivation operations shall not be considered a subset of disposal operations.
 - (8) In NTS 8719.14 paragraphs 1.1.3 and 4.1.c, the Contractor may use alternative standard analytical tools other than NASA’s Debris Assessment Software (DAS), to analyze the risk of collisions with small objects.
 - (9) Documents referenced in NPR 8715.6A and NTS 8719.14 unless expressly incorporated into the Contract, are applicable only as guidelines for the Contractor.
 - (10) The responsibilities defined within NPR 8715.6A and NTS 8719.14 for the Center personnel, up to and including Center Director are understood to apply to the positions of those Contractor employees performing the specified functions. **(Modification 69)**
- (e) The following documents will be followed in accordance with E-2(c) above:
(Modification 51)
- (1) NPD 8710.1A, Emergency Preparedness Program, dated January 16, 2002
 - (2) NPR 8621.1B, NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping w/Change 4 (11/02/2009) dated May 23, 2006, is incorporated in accordance with H-7. **(Modification 69)**
 - (3) NASA-STD-8719.9, Standard for Lifting Devices and Equipment, dated May 9, 2002
 - (4) NPD 8720.1, NASA Reliability and Maintainability (R&M) Program Policy, dated October 15, 1997

(5) NPD 8710.5D, NASA Policy for Pressure Vessels and Pressurized Systems, dated March 12, 2008, with the condition that the Installation Pressure Systems Manager has cognizance over all ground based support pressure vessels/systems and the Systems Safety Office Manager has cognizance over flight systems. One of these personnel shall be designated as the Pressure Systems Manager. NASA Technical Standard 8719.17 Revision A, NASA Requirements for Ground-Based Pressure Vessels and Pressurized Systems (PVS) Approved 11/06/09 is incorporated with the following conditions:

(i) It is understood that the requirements to certify (or qualify/accept) all ground-based PVS prior to operation/use applies to newly acquired PVS and not to legacy PVS. All legacy PVS shall be certified (or a deviation or waiver shall be processed) in accordance with the NASA Standard within five years from the effective date of the Modification incorporating this NASA Standard into the NASA-JPL Contract.

(ii) Section 4.5.12, “No later than September 22, 2011 (five years from the original issue date of this standard), each Center shall . . .” is understood to mean “No later than five years from the effective date of the Modification incorporating this Standard into the NASA-JPL Contract, the Contractor shall . . .”. **(Modification 69)**

(f) The Contractor shall participate in the Government-Industry Data Exchange Program (GIDEP) Alert Program subject to the following conditions:

(1) The Contractor will participate in the Government-Industry Exchange Program as part of the implementation of the ISO 9001 nonconforming material reporting requirements.

(2) The Contractor reserves the discretion to require or request GIDEP reporting from subcontractors as JPL deems appropriate, and not subject to Contracting Officer approval.

(3) The Contractor will continue to use and tailor its own standard procedures, D-11119A, Alert/Concerns Handbook, in order to meet GIDEP Alert requirements, which includes closed loop problem reporting. In the event of a conflict between NPG 8735.1A, dated August 22, 2002 and the JPL document, the NASA document prevails.

(g) Individual task orders will specify inspection and acceptance criteria as appropriate.

[END OF SECTION]

SECTION F - DELIVERIES OR PERFORMANCE

F-1 TERM OF THIS CONTRACT

The period of performance is from October 1, 2003, through March 31, 2012. **(Modification 77)**
The maximum period of performance of this Contract shall not exceed ten years, through September 30, 2013. The Contractor shall not perform work beyond the terminal date of this contract, irrespective of the fact that the anticipated completion date of a task order may extend beyond such terminal date.

(Modification 77 deleted the remainder of F-1)

F-2 DELIVERIES

Delivery instructions shall be specified in each task order, as appropriate. Government Bills of Lading (GBL) may be used as requested by the Contractor and approved by the NASA Transportation Officer. All GBLs used for the purpose of satisfying the requirements of the International Traffic in Arms Regulations, 22 CFR 126.4, must be reviewed and approved by the Export Administrator in the NASA Management Office at JPL or the NASA Export Administrator in the Office of External Relations at NASA Headquarters if needed. **(Modification 42)**

F-3 STOP-WORK ORDER (FAR 52.242-15) (AUG 1989) (ALTERNATIVE I) (APR 1984) (DEVIATION)

(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 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, and the Contract shall be modified, in writing, accordingly, if --

(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.

(End of Clause)

F-4 BILLS OF LADING (NFS 1852.247-73) (JUN 2002) (DEVIATION)

The purpose of this clause is to define when a commercial bill of lading or a government bill of lading is to be used when shipments of deliverable items under this contract are f.o.b. destination.

(a) **Commercial Bills of Lading.** All domestic and domestic overseas shipments shall be made via commercial bills of lading (CBLs). As used in this clause, "domestic overseas" means non-continental United States (i.e. Hawaii, Commonwealth of Puerto Rico, and possessions of the United States). The Contractor shall prepay domestic transportation charges. The Government shall reimburse the Contractor for these charges if they are added to the invoice as a separate line item supported by the paid freight receipts. If paid receipts in support of the invoice are not obtainable, a statement as described below must be completed, signed by an authorized company representative, and attached to the invoice.

"I certify that the shipments identified below have been made, transportation charges have been paid by (company name), and paid freight or comparable receipts are not obtainable.

Contract or Order Number: NAS7-03001

Destination: TBD."

(b) **Government Bills of Lading.**

(1) International (export) overseas shipments of items deliverable under this contract shall be made by Government Bills of Lading (GBLs) only when ITAR exemption 126.4 is

authorized for use by NASA. All international shipments of items deliverable under this contract that are not covered under ITAR exemption 126.4 shall be made by Commercial Bill of Lading.

(2) At least 15 days before shipment, the Contractor shall request in writing GBLs from: [Insert name, title, and mailing address of designated NASA transportation officer or other NASA official delegated responsibility for GBLs]. If time is limited, requests may be by telephone: [Insert appropriate telephone number]. In all instances, the use of ITAR exemption 126.4, is limited to “temporary” exports; i.e, exports of hardware that will, in general, be out of the U.S. for a maximum of four years, unless otherwise authorized by NASA. Requests for GBLs shall include the following information.

(i) Item identification/ description.

(ii) Origin and destination.

(iii) Individual and total weights.

(iv) Dimensional Weight.

(v) Dimensions and total cubic footage.

(vi) Total number of pieces.

(vii) Total dollar value.

(viii) Other pertinent data, such as: name, date and number (if applicable) of the NASA international agreement or Caltech subcontract that requires the export, evidence that a NASA Export Administrator has authorized the use of the 126.4 exemption, destination control statement and/or shipment markings as required by the ITAR and/or the NASA international agreement.

(End of Clause)

[END OF SECTION]

SECTION G - CONTRACT ADMINISTRATION DATA

G-1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

The following Contract clauses pertinent to this section are hereby incorporated by reference:

I. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.223-71	DEC 1988	FREQUENCY AUTHORIZATION
1852.227-70	MAY 2002	NEW TECHNOLOGY
1852.242-70	SEP 1993	TECHNICAL DIRECTION
1852.242-73	JUL 2000	NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING
1852.245-73	AUG 2001	FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS

G-2 COST SEGREGATION AND REPORTING

(a) General. Costs under this Contract will be segregated and reported as set forth below. The Contractor shall transmit such reports via telnet, internet, ftp, telecommunication, tape, or hard copy, as requested by the Government. The parties understand that the impact of changes in NASA’s accounting system will be incorporated into the Contract in coordination with the Contractor once IFMP is implemented.

(1) Research and Development Work. The Contractor shall segregate, account, summarize, and report the accrued costs for each program Unique Project Number (UPN) to the eleven-digit level of NASA Agency-wide Coding Structure (AWCS) in accordance with NASA FMM 9121-20, 9121-21, and 9121-22, by each task order for all work performed pursuant to C-1(a) and C-1(b) herein. The Contractor shall not transfer costs between task orders except:

(i) in those limited instances where the costs are found to have been originally charged to an incorrect JPL Project/Task Number due to a mistake or error, provided that sufficient documentation is maintained by the Contractor to demonstrate that the transfer was indeed required to correct a mistake or error,

(ii) with prior written approval or at the written request of the Contracting Officer, or

(iii) to allow for the cost transfer of unused materials within the period of performance of the originating Task Order. **(Modification No. 34)**

(2) Related Facilities Management/Maintenance. The Contractor shall segregate, account, summarize, and report the accrued costs for each task order and each program Facilities Project Number (FPN) to the four-digit level of the NASA Agency-wide Coding Structure in

accordance with NASA Financial Management Manual FMM 9121-30 for all work performed pursuant to C-1(c)(1) herein. The Contractor shall maintain a one-to-one relationship between the FPN and task order to facilitate the accurate tracking of costs for Construction of Facility projects. Costs of task order amendments need not be maintained separately from the task order thus amended unless so specified therein for work performed pursuant to C-1(c)(1). Facilities maintenance costs shall be reported as requested by the Contracting Officer to assist NASA in complying with its CFO Act responsibilities.

(3) Closed Appropriations. Pursuant to the National Defense Authorization Act for Fiscal Year 1991, 104 Stat. 1485, P.L. 101-510, Nov. 5, 1990, all expired appropriation accounts at NASA Headquarters will be closed on September 30th of the fifth (5th) fiscal year after the end of the period of availability for obligation. The Contractor shall track closed appropriation accounts in the Contractor's accounting system in order to support the aforementioned closeout process. The Closed Account Obligations Reports shall be submitted to NASA as follows:

(i) The following Closed Account Obligations Reports shall be submitted by the Contractor to the Contracting Officer within the times specified for each. All reports will include the task order number, the original (as well as replenishment) appropriation account and program year (if provided to the Contractor), the Agency-wide Coding Structure (AWCS) number and NASA UPN number, the reimbursable code and Reimbursable Agreement Number (RAN), if applicable, and the dollar amounts.

(ii) Unliquidated Amounts on Task Orders Not Yet Closed. This report will list all task orders (TOs) which contain closed account (i.e., expired) funds which have not been withdrawn or expended in accordance with P.L. 101-510. The report will be cumulative in nature, i.e., it will be updated with each annual submission. It is due within 15 working days of the start of each Government fiscal year (FY).

(iii) Expenditures Against Current Year Funds Designated As Replenishment. This report will list all TOs under which expenditures have been made by the Contractor (during the fiscal year just completed) against current year funds provided for JPL that have been designated by NASA as replenishment funds for closed accounts. It is due within 15 working days of the start of each Government FY.

(iv) Adjustments to Outstanding Obligations Against Closed Accounts. This report will list adjustments to JPL-reported outstanding obligations which occurred against closed accounts from the fiscal year just completed. It is due within 30 working days of the start of each Government FY. A supplemental report, explaining each adjustment, will be provided as soon thereafter as possible.

(4) Uncosted Obligations. A phased costing plan will be provided for direct funded task orders at such times and in such formats as directed by NASA.

(5) Replenishment Procedure. The Contractor will follow a Replenishment Procedure that is drafted by the Contractor within 30 days of the start of this Contract and approved by the Contracting Officer and the NASA Comptroller's office. The procedure should include at least the following topics:

- (i) the ability to flag closed appropriations in the Contractor's accounting system,
- (ii) how NASA will be notified on a timely basis of obligations and expenditures against these flagged accounts,
- (iii) the formal request for replenishment on a one-time basis against a specific PSA/DSA and
- (iv) how the Contractor plans to handle expenditures against these flagged accounts for which replenishment was not originally required.

Annual updates will be done on the replenishment procedure.

(6) NASA Contractor Financial Management Report. In complying with the reporting requirements of NFS 1852.242-73, the Contractor will submit NASA Contractor Financial Management Reports as follows:

(i) Monthly NF533 Reports will be submitted ten (10) work days after the end of the Contractor's fiscal month (the initial report will be submitted 45 work days after award of the contract). Each report will be comprised of a one page summary report at the total (prime) contract level by major cost category (i.e. direct labor, travel, services, procurements, Caltech Interdivisional Authorizations, benefits and applied burden). The Contractor will also provide NF533M data for each task order on a task order basis. The Contractor will also provide NF533M data for each NASA owned property (including software developed by JPL as a separate deliverable to NASA, but excluding software that is institutionally licensed and hardware and software where the costs are included in the costs of a hardware deliverable) acquired or fabricated, whether completed or in process, with an acquisition cost of \$1,000,000 or more. It is understood that if NASA wants other than the total value of a task order to be associated with the property costs, then NASA will assign separate Unique Project Numbers (UPNs)/sub-breaks or IFM equivalent to fund a task order.

(ii) Quarterly NF533 Reports will be submitted 15 calendar days prior to the beginning of the Contractor's fiscal quarter being reported (the initial report will be submitted 45 work days after award of the Contract). Each report will be comprised of a one page summary report at the total (prime) Contract level by major cost category (i.e. direct labor, travel, services, procurements, Caltech Interdivisional Authorizations, and benefits and applied burden), and NF533Q data for each task order on a task order basis.

(iii) The NF533 reports will not include narrative reporting, fee reporting at the task order level, or potential termination liability. Fee reporting may be required by the government when a incentive fee is applicable to a task order.

(iv) The NF533M will be submitted for three months after the period of performance of this Contract is completed. A significant amount of time may pass between the end of the Contract and final closeout. If no significant additional costs are being incurred or anticipated after the first quarter following the end of the contract, the Contracting Officer may

reduce or suspend NF533 reporting requirements. If the final cost of the Contract changes after the submission of the "final" report, the Contractor must submit a revised NF533 in the month the change is recognized.

(v) The NF533 will be submitted electronically once the IFM system is implemented by NASA. The electronic format will include cost and workforce data in a manner consistent with the current formats. Although detailed specifications cannot be provided to the Contractor at this time it is expected that they will not materially vary from the current reporting requirements outlined in this Contract for the hardcopy reports.

(vi) The NF533 reports are the official cost and workforce document for actual and estimated cost performance. Any financial data submitted to NASA in addition to the NF533 must be based upon data from the Contractor's financial system and reconcilable to that financial system as requested by the Contracting Officer.

(vii) The Contractor shall use the UPN breakout on the task orders as the lower level detail for the purposes for NFS 1852.242-73.

(viii) The requirement in NFS 1852.242-73 regarding subcontractor cost data is deemed to have been met by the Contractor accurately reflecting subcontractor NF533M and other cost data in the proper reporting categories on the Contractor's Form NF533 report.

G-3 PROPERTY REPORTING

The Contractor will furnish a current itemized listing of all NASA-owned property accountable under this Contract, including subcontractors and a separate current listing of NASA property in the possession of Instituto Nacional de Tecnica Aeroespacial (INTA) and the Commonwealth Scientific and Industrial Research Organization (CSIRO), within 30 days of receipt of written request from the Contracting Officer for such a listing in the format requested by the Contracting Officer. This listing should include NASA-owned Construction in Progress at the project level, Contract Work in Progress at the project level and software as required by NFS 1845.7101-1.

G-4 LIST OF GOVERNMENT-FURNISHED PROPERTY (NFS 1852.245-76) (OCT 1988) (DEVIATION)

(a) For performance of work under this Contract, the Government will make available Government property in accordance with Clause C-2 (Resources for Performance of the Contract) of this Contract on a no-charge-for-use basis. The Contractor shall use this property in the performance of this Contract at the locations stated in C-2(b) of this Contract, at the Contractor's campus facilities for on-campus research in accordance with paragraph (d) of FAR 52.245-5 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.

(b) The Contractor is responsible and accountable for all Government property as identified in C-2(b) in the Contract in accordance with paragraph (e) of FAR 52.245-5. For purposes of the overseas tracking and data acquisition facilities located in Spain and Australia, "sound business practice" and property control in accordance with FAR 45.5 shall consist of the following actions: maintenance of all required records, annual on-site review of property. A listing of the property is required as requested per Clause G-3 (Property Reporting). For purposes of Goldstone Deep Space Communications Complex, "sound business practice" and property control in accordance with FAR 45.5 shall consist of the following actions: JPL will be responsible for NASA reports identified in NPG 8800.15A, Real Estate Management Program Implementation Manual, dated September 1, 1998.

(c) The Contractor is authorized to use Government-owned equipment, furnished or acquired for use in the performance of this Contract, in its on-campus research programs on a non-interference, no charge loan basis, under written procedures, including property and reporting procedures, that must be approved by the Contracting Officer. However, Government property that has no use under this Contract will not be retained solely for the Contractor's use, and will be dispositioned in accordance with the property terms of this Contract.

(End of Clause)

G-5 PROPERTY FINANCIAL CONTROL AND REPORTS

In addition to the requirements of NFS 1845.505-14, Reports of Government Property, (as revised through NASA FAR Supplement Directive (NFSD) 97-0), Chapter 9250 "Property Accounting", of the NASA Financial Management Manual (FMM) may be used as guidance. In the event of a conflict between the provisions of the NASA FAR Supplement and the applicable provisions of the NASA FMM as specified above, the provisions of the NASA FAR Supplement shall govern.

G-6 TASK ORDER PROCEDURE (NFS 1852.216-80) (OCT 1996), ALTERNATE I (OCT 1996) (DEVIATION)

(a) General. 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. Except for bilateral task orders, a task order shall be effective as provided therein. The Contractor shall proceed with performance of such task orders in accordance with their terms and the terms and conditions of this Contract. A bilateral task order shall be effective upon issuance by the Contracting Officer based on task plans initiated by the Contractor pursuant to paragraph (f)(1) below.

(b) Statements of Work.

(1) NASA Sponsors. Statements of Work for unilateral task orders shall be in accordance with NASA requirements as denoted by approval letters, concurrence on Contractor task plans or other documentation signed by NASA program personnel and directed to the Contracting Officer.

(2) Non-NASA Sponsors. Statements of Work for bilaterally accepted work, where the sponsor is other than NASA, shall be in accordance with the Contractor proposals sent to the non-NASA sponsor as negotiated with the Contractor by the NMO with the concurrence of the non-NASA sponsor. The Contractor may procure computer hardware and software for a non-NASA sponsor for prototype units and software development purposes only. All non-NASA sponsored work for or involving foreign entities must be reviewed through the NASA Export Administrator in the NASA Management Office at JPL or the NASA Export Administrator in the Office of External Relations, if needed, prior to the approval by the NMO Contracting Officer. **(Modification 42)**

(3) Performance Based Contracting (PBC) Task Orders. NASA task orders may be performance based when the NASA sponsor defines the work as PBC prior to negotiation of the statement of work. NASA must define what the end product must do and any critical constraints for hardware or end-item deliverables and must define performance requirements for services. NASA and the Contractor must agree in the task plan on budget, schedule, and end product or service performance requirements in accordance with the end product definition and critical constraints set by NASA. The Contractor may recommend measurement methods and metrics for approval by the technical director, but the technical director is responsible for employing measurement methods that can be clearly communicated to the Contractor. **(Modification 77)** The PBC task orders will be completion type task orders and will be considered complete upon technical director's approval of the end product or service. The Contracting Officer will make the final determination of which tasks shall be PBC.

(c) Special Procedures for Tasks Designated by NASA. Task orders shall be in writing, originals shall be in hard copy; be numbered in a succession of numbers; be dated; shall describe the work to be performed or the services or supplies to be furnished; shall state both the estimated cost under this Contract, and the amount allotted for performance thereunder, and the programmatic estimated cost; shall set forth both the contractual period of performance and the programmatic period of performance; shall set forth the appropriation and allotment chargeable and any other pertinent fiscal or administrative data; shall include delivery instructions if required and describe the applicability of the clauses from Clause H-30 (Clauses Applicable on a Task Order Basis); may include performance standards and other requirements as appropriate; and shall be signed by the Contracting Officer. In the case of bilateral task orders, the task order shall also be accepted in writing by the Contractor.

(d) Special Procedures for Critical Flight Project Tasks.

(1) Requirement for additional detailed Technical, Cost, and Schedule information. In addition to other requirements set forth in this clause, NASA may determine that additional technical, cost, and schedule information be provided for task plans associated with critical flight projects, as designated by the cognizant NASA Office. The additional information will facilitate a tailored comprehensive review by NASA commensurate with procedures for evaluation of proposals received under Announcement of Opportunity requirements.

(2) Flight Project Performance Incentives. Those task orders for critical flight projects that NASA, after consultation with the Contractor, has deemed amenable to incentivization and identified during Phase B will include performance incentives in accordance with Clause B-4 (Cost and Performance Incentives for Tasks) of this Contract. Performance incentives will be negotiated and implemented prior to the initiation of the Implementation Phase (Phase C/D) of the project. Failure of NASA and the Contractor to agree on performance incentives for a Flight Project may be considered by NASA in decisions on whether to proceed to Implementation (Phase C/D).

(e) Performance Incentives. NASA reserves the right to require performance incentives be incorporated for work performed under this Contract in accordance with Clause B-3 (Cost and Performance Incentives for Tasks). These performance incentives may be for tasks other than critical flight projects. Failure of NASA and the Contractor to agree on performance incentives may be considered by NASA in decisions on whether to proceed.

(f) Procedure. A task order may be issued by the Contracting Officer upon submission of a task plan pursuant to either (1) or (2) below.

(1) When in a position to do so without a prior request, the Contractor shall provide the Contracting Officer with a task plan that includes:

(i) A summary statement of work.

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

(iii) A reference to the project plan, when applicable, which serves as the detailed statement of work for the task order. The project plan shall be approved by the NASA Enterprise.

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

(v) Any other resources (travel, materials, equipment, facilities, etc.) requested.

(vi) Deliverables, with the minimum being a final report.

(vii) A cost estimate for the work to be performed.

(viii) Mission assurance, import/export and any other special requirements, as appropriate.

(2) When NASA desires to issue a task order pursuant to C-1(a) and a task plan has not been received pursuant to (1) above, the Contracting Officer shall provide the Contractor with the following data:

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

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

(iii) 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 task plan.

(iv) Within 60 calendar days after receipt of the Contracting Officer's request, the Contractor shall submit a task plan conforming to the request. However, within 30 calendar days after receipt of the notice that funds have arrived for the proposed task, the Contractor shall submit a task plan conforming to the request.

(3) After review and necessary discussions, the Contracting Officer may issue a task order to the Contractor as set forth in (b) above.

(g) Acceptance. Upon receipt of a unilateral task order issued by the Contracting Officer pursuant to paragraph C-1(a), the Contractor shall promptly, and not later than ten days from such receipt, notify the Contracting Officer in writing, if, in its opinion, (1) the resources provided for performance of the work of the task order are inadequate; or (2) performance of the task is not technically feasible. Additionally, the Contractor shall notify the Contracting Officer of any other major problems that might, in the Contractor's opinion, threaten accomplishment of the work under the task order. Notwithstanding the foregoing, the Contractor shall proceed with performance of the work of the task order in accordance with its terms.

(h) Modification Procedure. Any unilateral task order issued pursuant to paragraph C-1(a) may be amended by the Contracting Officer at any time. Bilateral task orders may be amended by mutual agreement of the parties. Funds withdrawal from any task order shall be coordinated with the Contractor to ensure the funds decrease does not reduce the amount allotted to the task order below that amount estimated by the Contractor to be necessary to cover (i) all expenditures and other amounts accrued against the task order, (ii) all outstanding obligations and commitments against the task order to the extent they cannot be withdrawn. The Contractor will identify all funds available for withdrawal upon completion of the task order's period of performance. Subject to the provisions of Clause I-11, Limitation of Cost (FAR 52.232-20); Limitation of Funds (FAR 52.232-22) (Deviation), the Contractor shall not terminate work on any task order, unless so directed by the Contracting Officer.

(i) Performance on the Task Order. During the performance of the task order, the Contractor shall notify the Contracting Officer of any major problems that might, in the Contractor's opinion, threaten accomplishment of the work being performed within schedule and within budget under the task order. The Contractor shall forward a copy of the final report or notice of hardware or other deliverables to the Contracting Officer for all task orders.

(j) 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 in all cases except for those elements of a PBC task plan which requires NASA-Contractor agreement under subparagraph G-6(b)(3) above.

(k) The Contracting Officer shall be copied on all financial and progress reports required under any task order, including but not limited to NASA Contractor Financial Management Reports (NASA Form 533 reports) and Project Management Reports.

(End of Clause)

G-7 TRANSFERS OF FUNDS BETWEEN TASK ORDERS

(a) General. Funds may not be transferred from one task order to another task order unless specifically authorized by the Contracting Officer. The Contractor shall not transfer costs between task orders except: in those limited instances where the costs are found to have been originally charged to an incorrect JPL Project/Task Number due to a mistake or error, provided that sufficient documentation is maintained by the Contractor to demonstrate that the transfer was indeed required to correct a mistake or error, or with prior written approval or at the written request of the Contracting Officer.

(b) For the purposes of this schedule provision the term "task order" shall include discretely funded areas of a task order. When funds are transferred to any task order in accordance with paragraph G-7(c) below, the sum allotted for the performance of work under that task order shall be deemed to be increased in the amount so transferred. In the event the sum previously allotted for the performance of such work plus the sum so transferred exceeds the estimated cost of the performance of such work, such estimated cost shall be deemed to be increased in the amount of such excess. The sum allotted for the performance of work under any task order from which such transfer of funds is made shall be deemed to be decreased in the amount of the transfer. Additionally, the work statements of all affected task orders shall be modified if necessary to include resultant changes in scope of work if any. Such modification shall be in conformance with this provision.

(c) Procedure. The Contractor shall notify the Contracting Officer whenever, in its opinion, the funds made available to the Contractor by any task order are insufficient to permit continuance of the performance of work under that task order for more than fifteen (15) days after the date of the

notification. At that time the Contractor may request that the funds which have previously been allotted to another task order or task orders be transferred to the task order requiring additional funds, provided that:

(1) The funds to be transferred and the funds previously allotted to the task order requiring the additional funds are chargeable to the same program authority, and

(2) Additional funds transferred to any task order pursuant to this paragraph (b) shall not be greater than an amount which, together with the funds previously made available in the then-current fiscal year for the performance of work under that task order, equals the amount set forth in the most recent Program Operating Plan submitted by the Contractor for that fiscal year. The request shall state the amount which the Contractor desires to have transferred, the task order or task orders from which this amount is to be transferred, and the effect that the transfer of these funds will have upon the performance of the work under the task order or task orders from which the funds will be transferred. The Contracting Officer shall respond in a timely manner to the Contractor's funds transfer request. If the Contractor's request is approved, the Contracting Officer will issue the appropriate task order amendments to confirm the transfers of funds.

G-8 FUNDS PROCEDURE FOR TERMINATION OF TASK ORDERS

(a) In the event the Government terminates a task order and the funds allotted thereto are insufficient to cover termination costs, the Contractor shall notify the Contracting Officer of its estimate of the additional funds that it believes to be necessary to cover reasonable, allocable, and allowable task order termination costs as follows:

(1) Within 60 days of the notice of termination the Contractor shall provide an initial estimate of the total amount of such funds required, and shall also identify those funds legally available for removal from other task orders which the Contractor recommends be used to cover such estimated total termination costs; and

(2) Within 180 days of the notice of termination, the Contractor shall supplement the initial estimate by providing a funds requirement proposal, with supporting detail for each cost element, and with any further recommendations regarding a source of funds.

(b) Upon receipt of the initial estimate described in (a)(1) above the Contracting Officer will proceed with the actions necessary to support obtaining the requested funds.

(c) Upon receipt of the funds requirement proposal described under (a)(2) above, the Contracting Officer will perform an analysis of such proposal, and the parties will promptly pursue agreement as to the amount of funds mutually determined to be necessary to cover the termination costs.

(d) Within 90 days of receipt of the Contractor's funds requirement proposal described under (a)(2) above, the Contracting Officer will provide the Contractor direction on the source of funds to

cover task order termination costs. In the event that the Contracting Officer does not provide such specific redirection of task order funds or provide other unobligated funds within the above-noted 90-day period, the Contracting Officer shall be deemed to have authorized the redirection of the funds as proposed by the Contractor in its notification.

(e) The Contracting Officer will document the transfer of funds by the subsequent issuance of a task order amendment.

(f) Nothing in this G-8 shall be deemed to limit or otherwise affect the rights of the Contractor under paragraph (k) of Clause I-11, Limitation of Cost (FAR 52.232-20); Limitation of Funds (FAR 52.232-22) (Deviation).

(g) In no event shall Construction of Facilities appropriated funds be used for termination costs other than for the authorized CoF project(s).

G-9 TECHNICAL DATA CERTIFICATION, REVISION AND WITHHOLDING OF PAYMENT

The Contractor agrees to insert the clause at FAR 52.227-21, Technical Data Declaration, Revision and Withholding of Payment - Major Systems (JAN 1997), suitably modified to identify the parties, in all subcontracts for a "major system" as that term is defined in 41 U.S.C.A. 403.

G-10 SMALL BUSINESS SUBCONTRACTING PLAN

(a) Attachment D sets forth the Contractor's Small Business Subcontracting Plan as agreed to by the parties. Small Business procurement goals shall be established annually by mutual agreement between the Contractor and NASA.

(b) In applying paragraph (d)(9) of FAR 52.219-9, Small Business Subcontracting Plan, it is understood and agreed that the requirement that the Contractor require subcontractors (except small business concerns) who receive subcontracts in excess of \$550,000 (\$1,000,000 for construction of any public facility) to adopt a similar plan only applies to subcontracts which have subcontracting possibilities. In those cases where the subcontract meets the thresholds but no plan is adopted, the subcontract file shall document why that is the case. **(Modification 69)**

(c) The standards set forth in paragraph (b) above shall also apply to letter subcontracts. However, in acknowledgment of the urgency associated with letter-contract procurements, the small business subcontracting plans included in letter contract files may be preliminary in nature. Furthermore, in limited cases of extreme urgency, development of such preliminary plans for letter contracts may take place after letter-contract award, but in such instances the Contractor shall ensure that the plans are established as soon as possible in order to maximize achievement of Small Business procurement goals.

(d) In applying paragraph (k) of said FAR 52.219-9, Small Business Subcontracting Plan, it is understood and agreed that the failure of a subcontractor to comply in good faith with the clause of its subcontract entitled "Utilization of Small Business Concerns", or with any plan required to be included in its subcontract, shall be a material breach of such subcontract, but that such failure on the part of the subcontractor shall not itself constitute a breach of this prime Contract. However, a failure of the Contractor to comply in good faith with such clause in this Contract, or with any plan required to be included in this Contract, shall be a material breach of this Contract. **Modification 69)**

(e) The Contractor shall as soon as practicable notify the Contracting Officer of any material breach, known to the Contractor, of a subcontract caused by failure of a subcontractor to comply in good faith with its Small Business Subcontracting Plan.

G-11 PROGRAM/PROJECT MANAGEMENT

(a) Task orders for space flight programs and projects issued under this Contract shall be managed by the Contractor under the direction of NPD 7120.4B, Program/Project Management, dated December 6, 1999, and NPR 7120.5D, NASA Space Flight Program and Project Management Requirements, dated March 06, 2007. **(Modification 51)**

(1) NPD 7120.4B will be implemented predicated on the condition that Implementation will begin upon task order execution and after approval of the Program Commitment Agreement (PCA).

(2) NPR 7120.5D will be implemented predicated on the following conditions: **(Modification 51)**

(i) Documents referenced within the NPD and NPR do not apply unless otherwise incorporated in this Contract. **(Modification 51)**

(ii) The JPL Director may delegate the appointment of project managers.

iii. The responsibilities defined within the NPR for the Center personnel up to and including Center Director are understood to apply to the positions of those Contractor employees performing the specified functions. **(Modification 51)**

iv. Preface, Section P.2, paragraph b, last sentence, the text "as of the effective date of this NPR" is understood to mean "as of the effective date of the Modification incorporating NPR 7120.5D". **(Modification 51)**

v. The Contractor accepts sections 2.5.4, 4.4.2.c.(3), 4.5.2.c.(2), 4.5.2.c.(4), 4.6.2.c.(2), 4.7.2.b.(2), Appendix A – Definition of Integrated Baseline Review (IBR), Appendix F, sections 1.4, 3.1.c.(6)(i), 3.1.c.(6)(ii) (except "Federal contract management agency" is unmodified), 3.1.c.(6)(v), 3.4.a, 3.4.c., 3.5.e., and 3.13 with the understanding that the words "contract" and "contracts" used therein mean those subcontracts awarded by the Contractor; the terms "contractor" and "contractors" refer to the Contractor's subcontractors; and "subcontracts" refer to lower-tier subcontracts of the Contractor. **(Modification 51)**

- vi. The Contractor accepts the definition of Integrated Baseline Review (IBR) in Appendix A, with the understanding that “and the Government” means “and the Contractor”. **(Modification 51)**
- vii. The Contractor accepts Appendix F, section 2.4 with the understanding that the references to “full cost civil service and support contractor workforce” (in both places), mean “Contractor’s and its support subcontractor workforce”. **(Modification 51)**
- viii. The Contractor accepts section 4.5.2.a.(2) with the understanding that the Contractor will support the environmental planning process conducted by the Government. The Government retains all responsibility for compliance and must approve all documentation developed in conjunction with this requirement. **(Modification 51)**
- ix. The Contractor accepts sections 4.5.2.c.(9) and 4.6.2.b.(5) with the understanding that unless the Contractor establishes its own vehicle test or launch range it won't develop its own independent Preliminary and Baseline Range Safety Risk Management Plans. Instead, when applicable, the Contractor will provide the necessary inputs to the Vehicle Program Manager or other NASA designee to support the implementation of Range Safety Risk Management Plans at any Range used by JPL. **(Modification 51)**

(b) Reserved. **(Modification 51)**

(c) Reserved. **(Modification 51)**

(d) Reserved. **(Modification 51)**

(e) Risk-Based Acquisition Management. As a part of program/project acquisition, risk management shall be considered, including safety, security, (including Information Technology security), health, export control, and damage to the environment. The Contractor shall address risk management in the context of acquisition planning, selecting sources, choosing contract type, structuring award fee incentives, administering contracts, and conducting contractor surveillance. Additional guidance is referenced in NPR 7120.5D. **(Modification 51)**

G-12 USE OF DEPARTMENT OF DEFENSE SERVICES

The Contractor shall, to the extent required by the Contracting Officer, utilize Department of Defense audit, source inspection and property administration services. Other administrative services of the Department of Defense, which may be available to the Contractor, shall be utilized to the extent deemed practicable by the Contractor.

G-13 REFERENCES TO FAR "RIGHTS IN DATA" CLAUSE

References in FAR 52.227-16, Additional Data Requirements, to the FAR Clause at 52.227-14, Rights in Data, shall be deemed to refer to FAR 52.227-14, Rights in Data--General (ALT II, III, V), of this Contract.

G-14 NASA ISSUANCE SYSTEM AND GOVERNMENT POLICIES

(a) For purposes of this Clause, Government Policies includes the NASA Management Directives System publications ("NASA Issuances"); certain other Government orders, regulations, procedures, manuals, or advisories (e.g., Federal Aviation Administration Advisory Circulars; National Industrial Security Program Operating Manual) that NASA actively determines applicable to the Contractor's performance under the Contract; and Executive Orders of the President.

(b) In performing work under this Contract, the Contractor shall comply with the requirements of the Government Policies, or parts thereof, so identified in Sections A through J of the Contract.

(1) Except as provided for in paragraph (c) of this clause, the Contracting Officer, by unilateral modification to the Contract, may add, modify, or delete the requirements of Government

Policies, or parts thereof, in accordance with FAR 52.243-2, Changes – Cost Reimbursement Alternatives IV/V.

(2) Attachment C to the Contract is a quick reference of the Government Policies that are applicable to the Contractor's performance under this Contract. Attachment C will be timely updated by the Contracting Officer whenever Government Policies have been added or deleted.

(3) Where the Government Policy prescribes a responsibility to a specific government organization or any subdivision thereof or to a specific government official or position up to the level of a NASA Center Director, it is the presumption of the parties that the Contractor shall comply with the requirements of the Government Policy with the functional or managerial equivalent within its own organizational structure, unless otherwise directed by the Contracting Officer. To the extent the Contractor believes it cannot comply with the requirements of the Government Policy with its own functional or managerial equivalent, the Contractor shall so inform the Contracting Officer in accordance with (c)(1) of this clause.

(c) Non-exigent circumstances. Except as provided for in paragraph (d) of this clause, the Contracting Officer shall notify the Contractor in writing of NASA's intent to add, modify, or delete a Government Policy.

(1) Within 30 working days after receipt of the Contracting Officer's notice, the Contractor shall provide a written assessment of the impact of the Contractor's compliance with the Government Policy being proposed for addition, modification, or deletion. This assessment shall address the impact on Contract cost and funding, technical performance, and schedule and identify any potential inconsistencies between this Government Policy and other terms and conditions of the Contract. The Contractor, as part of this assessment, may also advise the Contracting Officer of other potential impacts to the Contractor's performance under this Contract by providing a written rationale as to why the additional or modified Government Policy is not appropriate for incorporation into the Contract. Further, to the extent the Contractor believes its own policy or procedure is the functional equivalent or is more appropriate for application at JPL than the Government Policy being proposed for addition or modification, the Contractor may so advise the Contracting Officer by providing a written rationale as to why the Contractor's policy or procedure should be applicable under this Contract instead of the Government Policy. In addition, the Contractor may propose to satisfy the requirements of the Government Policies through the use of existing Contractor policies and procedures. NASA will have the unilateral right to determine whether the Contractor policies and procedures meet the outcome of the particular Government Policy. In the case of a Government Policy being proposed for deletion, the Contractor may similarly advise the Contracting Officer with a written rationale as to why the Government Policy should not be deleted.

(2) In the event that Contractor objects to the Government Policy being proposed for addition, modification, or deletion, the JPL Director may, within the 30 working day period in (1) of this paragraph, request, and schedule consultation with the Head of the NASA Institutional Program Office for JPL (Associate Administrator, Office of Space Science) or one of his or her Deputies regarding any such objection.

(3) The Contractor may, in those situations where NASA has given notice of its intent to add, modify, or delete more than several Government Policies, request an extension in time at any time prior to the expiration of the 30 working days provided in (1) of this paragraph. Such a request shall be made in writing to the Contracting Officer. Any period of extension granted to the Contractor under this paragraph by the Contracting Officer shall be added to the time in which the JPL Director has under (2) of this paragraph.

(4) The parties acknowledge that funding of additional or modified Government Policies may be done through one of several methods, including, but not limited to: (i) adjustment to the Contractor's burden rate; (ii) absorbing cost through the re-scoping of tasks performed under the Contract, or (iii) providing discretely funded task orders for the initiative. The actual funding mechanism shall be at the final discretion of the Head of the NASA Institutional Program Office for JPL (The Associate Administrator, Office of Space Science) or Deputy.

(5) If, at the completion of the 30 working day review period, or any agreed upon extension thereof, and after considering the information provided by the Contractor in (1) and (2) of this paragraph and any other information, NASA decides to add, modify, or delete a Government Policy (the "Final Requirements"), it shall do so pursuant to the FAR 52.243-2, Changes – Cost Reimbursement (Alternatives IV/V) and the Contractor so notified in writing. The Contractor shall immediately comply with the Final Requirements. It is understood that NASA must identify the funding mechanism prior to JPL incurring actual costs associated with the Final Requirements.

(d) Exigent Circumstances. The Contracting Officer may, in those situations where the Government believes there are exigent circumstances, unilaterally modify the Contract to add, modify, or delete a Government Policy notwithstanding paragraph (c) of this clause. The Contractor shall immediately comply with the added, modified, or deleted requirements. The Contract modification shall be made pursuant to FAR 52.243-2, Changes – Cost Reimbursement Alternatives IV/V and the Contractor so notified in writing as soon as practical.

(e) Regardless of the performer of the work, the Contractor is responsible for complying with the requirements of this clause. The Contractor is responsible for flowing down the requirements of this clause to subcontracts at any tier to the extent necessary to ensure the Contractor's compliance with the requirement of this clause.

G-15 EXPORT CONTROL REGULATIONS

(a) General. In the performance of this Contract, the Contractor will from time-to-time be required to handle, process, store, or transmit electronically technical data, software or equipment which may be subject to the export laws and regulations of the United States. The Contractor shall control access to these assets and maintain appropriate records as required by law. The Contractor will from time-to-time be required to deliver, disclose, or transfer (export) to foreign entities, (including foreign nationals that are Contractor employees) technical data, software or equipment which may be subject to the export laws and regulations of the United States and which may require an export license (or other regulatory agency approval) or the use

of a license exemption/exception. Such exports, which would include, but not be limited to, export of technical data as defined at 22 CFR 120.10, will from time-to-time be required for, and be in furtherance of, the performance of this Contract. The Contractor shall comply with Federal export laws and regulations in the performance of this Contract.

(b) NASA-Sponsored Work.

(1) In the performance of NASA-sponsored work pursuant to Clause G-6 (Task Order Procedure) of this Contract where such work is in furtherance of planned or in-place international agreements between NASA and a foreign partner, the Contractor will identify to NASA that such work requires the transfer to foreign entities of equipment, software or technical data controlled under the International Traffic In Arms Regulations (ITAR) or the Export Administration Regulations (EAR). In each such instance, language will be included in the task plan indicating that the Contractor is required under the terms of this Contract and the task order to deliver, disclose, or transfer (export) technical data, software or equipment to a specific foreign entity, including appropriate limitations, provisos and instructions applicable to the specific transfers. Any and all exports in support of such task plans which do not fall within either generally available license exceptions/exemptions, including but not limited to the ITAR exemption available under 22 CFR 125.4 (b)(3), shall be exported under Contractor obtained licenses, unless NASA and the Contractor determine that the export is unnecessary for performance of the applicable task plan. To the extent that the Government agrees to the use of a Government Bill of Lading to satisfy the requirements of ITAR exemption 22 CFR 126.4, the Contractor shall provide all documentation required for NASA to issue such GBLs.

(2) In the event the Contractor determines that in performance of NASA-sponsored work pursuant to Clause G-6 (Task Order Procedure) of this Contract it would be appropriate to deliver, disclose or transfer (export) technical data, software or equipment to a foreign entity and such work is not in furtherance of a planned or in-place international agreement between NASA and a foreign partner, the Contractor may request NASA to obtain export authorization for such export. If NASA concurs that such export is necessary, NASA may authorize the use of exemptions uniquely available to the U.S. Government or seek to obtain a license. The Contractor shall provide all documentation required for NASA to issue Government Bills of Lading (GBLs) or to obtain a license. From time-to-time other forms of authorization to the Contractor may be used by NASA (e.g., a letter from the Contracting Officer)

(c) Work for Other U.S. Government Sponsors. In the performance of non-NASA-sponsored work for other U.S. Government sponsors pursuant to Clause G-6 (Task Order Procedure) of this Contract, the Contractor will identify to NASA that such work requires the transfer to foreign entities of equipment, software or technical data controlled under the ITAR or EAR. In each such instance, subject to NASA confirmation with the U.S. Government sponsor that such export is required, language will be included in the task order indicating that the Contractor is required under the terms of this Contract and the task order to deliver, disclose, or transfer (export) technical data, software or equipment to a specific foreign entity. Any and all exports in support of such task orders which do not fall within either generally available license

exceptions/exemptions or the 22 CFR 125.4(b)(3) exemption shall be exported, as specified by the other U.S. Government sponsor, using exemptions available to that sponsor or using a license obtained by that sponsor or by the Contractor.

(d) Work for Non-U.S. Government Sponsors. Any and all exports in support of task orders for non-U.S. Government sponsored work that does not fall within generally available license exceptions/ exemptions shall be exported pursuant to a license obtained by the Contractor or the non-U.S. Government sponsor. The Contractor shall not utilize the 22 CFR 125.4(b)(3) or other exemptions uniquely available to the U.S. Government for such exports.

(e) Limitations. In no instance will NASA apply for a Technical Assistance Agreement or a Manufacturing License Agreement as defined in the ITAR on behalf of the Contractor. In no instance will NASA apply for an export license on behalf of a subcontractor. In all cases not covered by relevant license exemptions as discussed above or licenses applied for by NASA for NASA-sponsored work as agreed with the Contractor, the Contractor shall be responsible for obtaining required export licenses or other approvals for performance of work under this Contract.

(f) Notification. In all instances wherein the Contractor applies for an export license, other prior approval, commodity jurisdiction, classification request or advisory opinion, in furtherance of work under this Contract, a copy of the Contractor's application package or other request as submitted to the U.S. government regulatory agency shall be provided to the NMO at JPL and the Office of External Relations, NASA Headquarters, Mail Code ID, Washington, DC 20546 (Attn: Manager, International Technology Transfer Policy).

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

G-16 FACILITIES

(a) Authorizations. Authorizations for acquisition of facilities will be provided as follows:

(1) Authorizations for the acquisition of facilities involving the use of funds appropriated for construction of facilities, or involving construction of any facility requiring more than \$1,000,000 of funds from other sources, will be provided pursuant to the terms of subparagraph C-1(c)(1) of this Contract. **(Modification 73)**

(2) In accordance with the facilities terms and conditions of this Contract acquisition of other facilities will be made by the Contractor for the performance of work under C-1(a), or C-1(b), provided, however, that nothing shall preclude the issuance of a task order, pursuant to C-1(c)(1) for the acquisition of any such other item of facilities, and provided further, that nothing herein shall preclude the Government from furnishing any item of facilities in lieu of authorizing the Contractor to acquire such item, and

(3) The Contractor shall manage all facility projects funded from NASA appropriations, inclusive of projects involving funds for which NASA will be reimbursed by other federal agencies, estimated to cost \$50,000 or less. Any facility project in excess of \$50,000 must be approved in writing by the NMO Facility Manager prior to the obligation of any funds for the proposed project. The requirements of this paragraph are in addition to, and not in lieu of, the requirements of Clause I-5, Subcontracts (FAR 52.244-2) (Aug 1998), (Alternate I) (Aug 1998) (Deviation). NASA Form 1509s with a value of \$1,000,000 and below shall be submitted to the NMO Facility Manager for approval and NASA Form 1509s valued greater than \$1,000,000, must be submitted to NASA Headquarters Facilities Engineering Division, Code LD 030 for approval. A copy of the NASA Headquarters' approved 1509 will be forwarded to the Contracting Officer and NMO Facility Manager. NPG 8820.2C, Facility Project Implementation Handbook, shall be utilized by the Contractor in preparing facility approval and implementation documents respectively. This applies to both Government-owned facilities and facilities leased by the Contractor. The definition of words utilized in facility approval documents (e.g., "construction", "repair", "rehabilitation", and "facility") shall have the meanings set forth in Attachment A to NPG 8820.2C "Facility Project Implementation Handbook". **(Modification 73)**

G-17 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NFS 1852.227-72) (JUL 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:

New Technology Representative

Office Code: SJ/180-801
 Address: NASA Management Office at JPL
 4800 Oak Grove Dr.
 Pasadena, CA 91109

Patent Representative

Office Code: SJ/180-802
 Address: NASA Management Office at JPL
 4800 Oak Grove Dr.
 Pasadena, CA 91109

(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. Inquires 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-18 CONTROL OF PROPERTY AT OVERSEAS TRACKING STATIONS

The Contractor shall provide technical surveillance and guidance at Government facilities at foreign locations in support of NASA work, covered by this Contract, including Deep Space Network Sites in Spain and Australia. Such oversight shall include an annual site visit for the purpose of conducting a property control system analysis.

G-19 ALLOCATED DIRECT COST REPORTING

The Contractor will provide financial reports in sufficient detail to enable the Contracting Officer to assess the effectiveness of Contractor's planning, monitoring and control of Allocated Direct Costs. These reports will include:

- (a) an annual report which shall include
 - (1) an overview of the contents of the budget together with the significant factors, requirements and assumptions that influenced the development of the allocated direct cost budget for the current fiscal year,
 - (2) the results of the prior fiscal year baseline allocated direct cost budget and actuals, and
 - (3) projections of estimated allocated direct costs and business-base assumptions for the subsequent five years;
- (b) monthly reports which shall include
 - (1) a comparison of baseline budget and allocated direct cost actuals by budget category,
 - (2) a variance report of the allocated direct costs actually incurred compared to the applied allocated direct costs and associated distribution bases, and
 - (3) report any significant changes to the baseline allocated direct cost budget, actuals or business base;
- (c) and such other special reports as the Contracting Officer may request.

G-20 WHOLE AGREEMENT

- (a) This Contract, NAS7-03001, contains the whole agreement between the Parties.
- (b) Appendices to this Contract are separate and non-binding documents appended for information only. Appendices do not constitute a part of this Contract.

G-21 CONTRACTOR REQUESTS FOR GOVERNMENT-OWNED EQUIPMENT (NFS 1852.245-70) (JUL 1997) (DEVIATION)

- (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 by JPL or its subcontractors for any Government-owned equipment with an item value over \$75,000 for performance of this Contract, the Contractor shall provide to the Contracting Officer, in accordance with the consent to subcontract provisions set forth in Clause I-5, Subcontracts (FAR 52.244-2) (Aug 1998), (Alternate I) (Aug 1998) (Deviation), a written request justifying the need for the equipment and 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.
 - (i) The Contractor will annually prepare and submit a projection of equipment acquisitions by Federal Supply Class for all items of equipment meeting NEMS control criteria. The Contractor will submit a quarterly report comparing actual acquisitions to projected acquisitions and the reason for deviations beyond 15%. Submissions will be made to the Contracting Officer (or designee).
 - (2) Notwithstanding the Contractor's ability to provide Government property (other than Equipment as defined in this provision) to its subcontractors in the performance of subcontracts under this Contract, the Contractor shall be authorized to permit its subcontractors to use Government-owned equipment only under the circumstances specified below. Upon determination by a subcontractor of need for any Government-owned equipment item for performance of a subcontract under this Contract, the subcontractor shall provide to the Contractor a written request justifying the need for the equipment and the reasons why subcontractor-owned property cannot be used, citing the applicable FAR or subcontract authority for use of the Government-owned equipment. Before authorizing the use of the requested Government-owned equipment, the Contractor shall review the subcontractor's written request and such other information as it deems relevant and shall conclude whether the need is justified. Equipment being acquired as a deliverable end item listed in the subcontract or as a component for incorporation into a deliverable end item listed in the subcontract is exempt from this requirement.

(3) The Contractor shall require that a subcontractor's request pursuant to subparagraph (b)(1) shall include a description of the item in sufficient detail to enable the Contractor to screen the Government's inventories for available equipment. For this purpose, the subcontractor shall be required to (i) prepare a separate DD Form 1419, DOD Industrial Plant Equipment Requisition, or equivalent format, for each item requested and (ii) forward it to the Contractor at least 30 days in advance of the date the subcontractor intends to acquire the item if approved by the Contractor. Multiple units of identical items may be requested on a single form. Instructions for preparing the DD Form 1419 are contained in NFS 1845.7102. The Contractor shall obtain Contracting Officer consent prior to approving the provision to, or acquisition by, its subcontractors of any item of equipment exceeding \$1,000.

(4) Unless the Contractor is authorized to conduct their own screening, 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 nonavailability 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)

[END OF SECTION]

SECTION H – SPECIAL CONTRACT REQUIREMENTS

H-1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

The following Contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.223-1	DEC 2007	BIOBASED PRODUCT CERTIFICATION (Modification 69)
52.223-2	DEC 2007	AFFIRMATIVE PROCUREMENT OF BIOBASED PRODUCTS UNDER SERVICE AND CONSTRUCTION CONTRACTS (Modification 69)
52.223-4	MAY 2008	RECOVERED MATERIAL CERTIFICATION
52.223-5	AUG 2003	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (with ALTERNATE 1 and ALTERNATE 2) (Modification 69)
52-223-15	DEC 2007	ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS (Modification 69)
52.223-16	DEC 2007	IEEE 1680 STANDARD FOR THE ENVIRONMENTAL ASSESSMENT OF PERSONAL COMPUTER PRODUCTS (Modification 69)
52.223-17	MAY 2008	AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS (Modification 69)

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.204-74	MAY 2002	CENTRAL CONTRACTOR REGISTRATION
1852.208-81	OCT 2001	RESTRICTIONS ON PRINTING AND DUPLICATING
1852.223-70	APR 2002	SAFETY AND HEALTH
1852.223-75	FEB 2002	MAJOR BREACH OF SAFETY OR SECURITY (ALTERNATIVE I) (MAY 2002)

1852.228-72	SEP 1993	CROSS-WAIVER OF LIABILITY FOR SPACE SHUTTLE SERVICES
1852.228-76	DEC 1994	CROSS-WAIVER OF LIABILITY FOR SPACE STATION ACTIVITIES
1852.228-78	SEP 1993	CROSS-WAIVER OF LIABILITY FOR NASA EXPENDABLE LAUNCH VEHICLE (ELV) LAUNCHES
1852.242-72	AUG 1992	OBSERVANCE OF LEGAL HOLIDAYS
1852.244-70	APR 1985	GEOGRAPHIC PARTICIPATION IN THE AEROSPACE PROGRAM

H-2 REPRESENTATIONS AND CERTIFICATIONS

The representations and certifications completed by the Contractor on November 7, 2002 and included in Part IV are incorporated herein by reference.

H-3 KEY PERSONNEL AND FACILITIES

(a) The personnel listed in (c) below, or specifically detailed in an AO or task plan as key personnel are considered essential to the work being performed under this Contract. Before removing, replacing, or diverting any of the listed or specified personnel, the Contractor shall:

(1) notify the NASA Program Director or cognizant Division Director reasonably in advance and

(2) discuss with that individual the justification for the removal, replacement or diversion (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the effort being performed.

(b) The Contractor shall make no diversion without the cognizant NASA Associate Administrator's consent.

(c) The list of personnel shown below may, with the consent of the Associate Administrator for the Office of Space Science and the JPL Director be amended from time to time during the course of the Contract to add or delete personnel:

(1) 'Director For' a JPL directorate or an equivalent position and above.

(2) JPL Project Managers and Project Scientists assigned full time to perform for a "flight project", including AO projects. The term "flight project" is a project which has as one of its principle purpose the construction and operation of one or more aeronautic or space vehicles and necessary ground support.

(d) The Contracting Officer will be notified in writing of changes at the 'JPL Director For' or an equivalent position and above.

H-4 MANAGEMENT CONTROLS

(a) The Contractor shall be responsible for maintaining, as an integral part of its organization, effective systems of management controls for both administrative and programmatic functions. Management controls comprise the plan of organization, methods, and procedures adopted by management to reasonably ensure that: the mission and functions assigned to the Contractor are properly executed; efficient and effective operations are promoted; computational, infrastructure, and data resources' confidentiality, integrity, and availability are maintained; resources are safeguarded against waste, loss, mismanagement, unauthorized use, or misappropriation; all encumbrances and costs that are incurred under the Contract and fees that are earned are in compliance with applicable clauses and other current terms, conditions, and intended purposes; all collections accruing to the Contractor in connection with the work under this Contract, expenditures, and all other transactions and assets are properly recorded, managed, and reported; and financial, statistical, and other reports necessary to maintain accountability and managerial control are accurate, reliable, and timely. The systems of controls employed by the Contractor shall be documented and satisfactory to NASA. Such systems shall be an integral part of the Contractor's management functions, including defining specific roles and responsibilities for each level of management, and holding employees accountable for the adequacy of the management systems and controls in their areas of assigned responsibility. The Contractor shall, as part of the internal audit program required elsewhere in this Contract, periodically review the management systems and controls employed in programs and administrative areas to ensure that they are adequate to provide reasonable assurance that the objectives of the systems are being accomplished and that these systems and controls are working effectively.

(b) The Contractor shall be responsible for maintaining, as a part of its operational responsibilities, a baseline quality assurance program that implements documented performance, quality standards, and control and assessment techniques.

H-5 EXPORT LICENSES (NFS 1852.225-70) (FEB 2000) (ALTERNATIVE I) (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 JPL, 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.
- (e) The Contractor may request, in writing (through the Task Plan/Task Order process pursuant to G-15, or otherwise), that the Contracting Officer authorize it to export ITAR-controlled technical data (including software) pursuant to the exemption at 22 CFR 125.4(b)(3). The Contracting Officer or designated representative may authorize or direct the use of the exemption where the data does not disclose details of the design, development, production, or manufacture of any defense article.

(End of Clause)

H-6 WAGES, SALARIES AND PERSONNEL DATA

- (a) The Contractor agrees that all wages, salaries, and other compensation being paid, or to be paid, to the employees of JPL are being paid, and will be paid, in accordance with the Contractor's established wage and salary policy and practice and that such payments will be reasonable and consistent therewith. Further, the Contractor agrees to furnish the Contracting Officer its wage and salary schedules, its nonacademic personnel policies, and amendments thereto and modifications thereof, including job titles contained within such rate ranges and/or other descriptive information identifying the types of positions.
- (b) The Contractor shall provide the following aggregated data on its work force employed at JPL: occupational distribution, educational levels, and average age and rate ranges. Such data shall be submitted annually.
- (c) To the extent that these materials contain personally identifiable information, such records will be handled in accordance with the provisions of Clause H-16 (Property Rights in Records).

H-7 SAFETY AND HEALTH

- (a) This schedule provision supplements and implements NFS 1852.223-70, Safety and Health.
- (b) General. The safety and health plan required to be submitted by the Contractor pursuant to C-1(e)(9) shall implement the requirements of NFS 1852.223-70 and of the standards and specifications of paragraph (c) of this provision and shall describe the means to be employed by the Contractor to monitor and enforce said requirements. The plan shall include the Contractor's standards and criteria for imposing safety and health standards upon its subcontractors of any tier and its plans and procedures for monitoring compliance with such standards.
- (c) Standards. The following safety and health standards, specifications, reporting requirements and provisions are prescribed pursuant to paragraph (a) of NFS 1852.223-70:

(1) General Standards and Specifications. The Contractor shall comply with applicable provisions of the Occupational Safety and Health Standards of the Occupational Safety and Health Act of 1970, Rules and Regulations of the Department of Labor issued pursuant thereto and applicable regulations of states provided for under the Act. The Contractor shall ensure that Contractor personnel are reasonably protected against occupational illness and injury on the job and on official travel overseas. The Government acknowledges the Contractor is required to comply with all applicable safety and health requirements established by the State of California and will also use all NASA Policy Directives (NPD's) and NASA Procedures and Guidelines (NPG's) that have been incorporated into the Contract. The Contractor shall provide a safety program utilizing NASA Procedural Requirements (NPR) 8715.3C, NASA General Safety Program Requirements dated March 12, 2008 (w/Change 4 dated 7/20/09) as a general policy guide. **(Modification 69)**

(2) Helipad Safety. The Contractor shall comply with all Federal, State, and local requirements applicable to the helipad at JPL. The following documents shall be used to establish a facility operation support and safety program tailored to the use of the helipad at JPL to be included in the safety and health plan to be submitted in accordance with paragraph (b) above.

(i) Chapter 4, Aviation Safety of NPR 8715.3C, NASA General Safety Program Requirements, dated March 12, 2008 (w/Change 4 dated 7/20/09). **(Modification 69)**

(ii) NPG 7900.3A, Aircraft Operations Management, dated April 8, 1999, as accepted in H-51. (See below.)

1. In Article H-7, SAFETY AND HEALTH, paragraph (c) Standards, (2) Helipad Safety, (ii), the reference to "NPG 7900.3A, Aircraft Operations Management dated April 8, 1999," is replaced by "NPR 7900.3A, Aircraft Operations Management w/Interim Revision to Chapter 3, dated April 8, 1999. **(Modification No. 48)**

a. In Article H-7, SAFETY AND HEALTH, paragraph (c) Standards, (2) Helipad Safety, (ii), the reference to "NPR 7900.3A, Aircraft Operations Management w/Interim Revision to Chapter 3, dated April 8, 1999," is replaced by "NPR 7900.3B Aircraft Operations Management Manual, dated June 14, 2007." **(Modification N0. 52)**

(iii) NASA 14 CFR 1204.14, Use of NASA Airfield Facilities By Aircraft Not Operated For The Benefit Of The Federal Government, dated July 1991.

(iv) FAA Advisory Circular 150/5390-2A, Heliport Design, dated January 20, 1994.

(v) FAA Order 8700.1, Chapter 61, Evaluation and Surveillance of Heliports, dated July 25, 1997.

(3) Flight Program/Project Safety. The Contractor shall include in each Program/Project Plan a description of the risk management process as required by NPR 7120.5D as specified in Clause G-11 (Program/Project Management) that addresses safety needs and special safety monitoring required for the flight program/project. The Project Plan containing such

requirements will be referenced in the flight project task order issued by the Contracting Officer and the Contractor shall comply with those requirements. **(Modification 51)**

(4) Nuclear Safety. Radioactive material will be handled in accordance with appropriate Federal, State, local and tribal regulations and requirements, to specifically include those of the State of California, Department of Energy and/or Nuclear Regulatory Commission. Launching of nuclear materials into space shall be done in accordance with National Security Council/Presidential Directive 25, as of May 8, 1996. Chapter 6, Nuclear Safety for Launching Radioactive Materials, of NPR 8715.3C, NASA General Safety Program Requirements, dated March 12, 2008 (w/Change 4 dated 7/20/09) provides specific additional NASA requirements. **(Modification 69)**

(5) Propulsion Safety. The Contractor shall comply with all applicable Federal, State, and local requirements applicable to propulsion safety and the requirements shall be used to establish a propulsion safety program to be included in the safety and health plan to be submitted in accordance with paragraph (b) above.

(6) Fire Safety. The Contractor shall comply with all applicable Federal, State, and local requirements pertaining to Fire Protection and Life Safety. NASA STD 8719.11, NASA Safety Standard for Fire Protection, dated December 19, 2000 will be followed to ensure safety of NASA facilities.

(7) Ammunition and Explosive Safety. The Contractor shall comply with all applicable Federal, State, and local requirements applicable to ammunition and explosive safety. The requirements of NSS 1740.12 NASA Safety Standard for Explosives, Propellants, and Pyrotechnics, dated August 1993 shall be used to establish an ammunition and explosive safety program to be included in the safety and health plan to be submitted in accordance with paragraph (b) above.

(8) Emergency Preparedness. The Contractor shall comply with NPD 8710.1A, NASA Emergency Preparedness Program, dated January 16, 2002, (as specified in Clause E-2 (Safety and Mission Assurance)) and all applicable Federal, State, and local requirements applicable to emergency preparedness in developing an emergency preparedness program. A separate Multihazard Emergency Response Plan will be developed, reviewed, and, if appropriate, updated and provided to the Contracting Officer or designee on an annual basis.

(9) Facilities Safety. The Contractor shall establish a facilities safety program using NASA STD 8719.7, Facility System Safety Guidebook, dated January 1998 as a guideline to assure that all new construction and facility modification activities will not impose unnecessary hazards to personnel and that such activities will be reviewed for compliance with applicable building codes and fire and life safety requirements per NASA-STD 8719.11, NASA Safety Standard for Fire Protection, dated December 19, 2000.

(10) Pressure Vessel and System Safety. The Contractor shall establish a pressure systems safety and recertification program in accordance with NPD 8710.5D, NASA Policy for Pressure Vessels and Systems, dated March 12, 2008, and NASA Technical Standard 8719.17 Revision A, NASA Requirements for Ground-Based Pressure Vessels and Pressurized Systems (PVS) Approved 11/06/09 (as specified in Clause E-2 (Safety and Mission Assurance) of this Contract). **Modification 69)**

(d) Illness, Incident, and Injury Experience Reports. The following illness, incident, and injury experience reports are prescribed pursuant to paragraph (d) of NFS 1852.223-70:

(1) Experience Reports. The Contractor shall prepare and submit to the Contracting Officer or his representative quarterly and semi-annual reports of occupational related illness, incidents, injury experience, worker's compensation costs; and government property damage due to mishaps or natural phenomena in such detail as prescribed in formats approved by the Contracting Officer or his representative.

(2) Investigative Reports. The Contractor shall furnish reports of investigation of individual incidents or accidents or close calls in formats approved by the Contracting Officer or his representative, provided, however, that the Contractor shall not be required to furnish personally identifiable information concerning Contractor or subcontractor employees. Lessons learned from these reports, excluding those related to close calls unless the Contractor believes material value may be derived from such reporting, will be inputted into the NASA Lessons Learned Program.

(3) Mishaps Reports. The Contractor shall furnish NASA mishap reports and respond to NASA requests for mishap reviews. The Contractor shall conduct its own mishap investigations consistent with NPR 8621.1B, NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping w/Change 4 (11/02/2009) dated May 23, 2006 with the understanding that all references to NASA in that policy shall be interpreted to mean JPL. The Contractor shall utilize the NPR 8621.1B, NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping w/Change 4 (11/02/2009) dated May 23, 2006 procedures as guidelines. The Contractor shall also report to the Contracting Officer or a designee any incidents that may have visibility in the press, mission failures, or mission anomalies that will have high NASA visibility in the press. **(Modification 69)**

(e) The Contractor shall immediately notify and furnish such other reports as the Contracting Officer or his representative determines to be related to the Contractor's safety and health program and its experiences hereunder.

(f) Nothing herein shall be construed as diminishing the Contracting Officer's rights pursuant to paragraph C-1(e) of this Contract.

"Article H-7, Safety and Health, is modified to add paragraphs (g), (h) and (i) as follows:

(g) Reserved **(Modification 31)**

(h) NPR 8715.5, Range Safety Program, dated July 8, 2005, is incorporated into this contract subject to the following understandings: (i) The NPR does not apply to radioactive hazards and/or the release of radioisotopes; (ii) Section 3.3.7.3 does not apply to projects involving Radioisotope Heater Units and Radioisotope Power Systems; and (iii) Documents referenced within the NPR do not apply unless otherwise incorporated into this contract.

It is agreed that a Task Order will be issued under the prime contract to fund this

requirement. **(Modification 21)**

- (i) The Contractor shall be granted access to NASA Incident Reporting Information System (IRIS) Data for all NASA Centers. The JPL IRIS Administrator and the JPL Occupational Safety Program Office Section Manager shall receive the “read only” role to the other Centers’ NASA IRIS documents relating to NPR 8621.1B. JPL subcontractor safety personnel will not be given this role unless the JPL IRIS Administrator approves this role in writing to the NASA IRIS accounts manager. **(Modification 69)**
- (1) No **medical information, personal identifiers or any other** private information will be provided to JPL.
 - (2) All material printed from IRIS shall be kept securely when not in use. Electronic transmission of records through email is prohibited. Discarded printouts from the system shall be shredded.
 - (3) NASA Centers are permitted “read only” access to data in JPL’s NASA IRIS program subject to the restrictions set forth in Article 16, Property Rights in Records, of this Contract. No **medical information, personal identifiers, or any other private** information will be provided by JPL. **(Modification 31)**

H-8 ENVIRONMENTAL MATTERS

- (a) Environmental Compliance. Environmental controls shall be in accordance with all applicable Federal, State and local regulatory requirements, and in accordance with other government policies as required in Clause G-14 (NASA Issuance System and Government Policies).
- (b) Environmental Compliance and Restoration (ECR) Program Provisions.
- (1) General. This section pertains to ECR activities (e.g. environmental studies, designs, projects, etc.) included in the ECR Program. The ECR Program funding is part of the ECR budget. The Contractor, if requested to do so by the Contracting Officer, shall provide assistance to the Government concerning any matter arising under or relating to ECR activities. Accordingly the Contractor has entered or may enter into Agreements with local governments and other instrumentalities in order to assist the Government on certain ECR activities. **(Modification Nos.19 and 69)**
 - (2) Implementation of ECR Program Activities. ECR program activities shall conform to NPR 8590.1, NASA Environmental Compliance and Restoration (ECR) Program, dated June 14, 2007. For the Jet Propulsion Laboratory, the NASA Management Office (NMO) represents Headquarters as parent Center for satisfying the requirements of this NPR. As such, the NMO has the responsibilities of the Center Environmental Office. **(Modification 69)**

(3) Environmental Project Support. NASA may require that certain environmental activities (studies, designs, and projects) be conducted by certain outside organizations or their contractors, including other Government agencies and other Centers. The Contractor shall provide access, facilities support, security, and other support services necessary for the outside organization to complete the environmental activity. The parties recognize that the Contractor is not responsible for the actions of any such outside organization doing business at the facility or at the facility and surrounding areas. In this regard, if third party claims are brought against the Contractor which are caused by or arise from the actions of such an outside organization doing business at the facility or at the facility and surrounding areas, those claims and any resulting liability there from to the extent attributable to such actions shall be deemed to "arise out of the performance of this contract" as that phrase is used in FAR 52.228-7 -- Insurance Liability to Third Persons, dated March 1996. This understanding, however, shall not alter any liability the Contractor would otherwise have as a Potentially Responsible Party under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §9601.

(c) NASA Issuances Applicable to Environmental Matters. The provisions of the current NASA Policy Directive (NPD) and NASA Procedural Requirements (NPR) documents below, shall be used for all work performed under this provision: **(Modification 69)**

(1) NPD 8500.1B, 'NASA Environmental Management,' dated December 20, 2007, is incorporated with the following conditions: **(Modification 69)**

(i) Reserved. **(Modification 69)**

(ii) The functional reviews referenced throughout the NPD are those performed by NASA. **(Modification 69)**

(iii) Information regarding environmental and energy management activities, as referenced in Section (f)(6), will be reported to the Contractor's cognizant management official(s). These requirements are not to be construed to limit NASA's authority to request specific environmental or energy data or reports. **(Modification 69)**

(iv) Regarding Section 4.2, Competence, Training and Awareness, paragraphs 4.2.1 a. and b., the Contractor will make on-line training available to all JPL employees who elect to take it, however, this will not be considered to be mandatory training. **(Modification 69)**

(2) Reserved. **(Modification 69)**

(3) NPR 8530.1A, 'Affirmative Procurement Program and Plan for Environmentally Preferable Products (REVALIDATED 4/3/09 w/change 3)', dated June 4, 2004 is incorporated into the Contract with the exception that the approval authority for waivers contemplated in the NPR is the Manager of the JPL Environmental Affairs Office. In Section 3.2.1.1.1., JPL agrees to comply with the Environmental Protection Agency's Comprehensive Procurement Guidelines list in effect on October 1, 2010. In Section 3.2.1.1.3 JPL agrees to use its best efforts to comply with the biobased preferable products list. **(Modification 69)**

(4) NPR 8580.1, ‘Implementing the National Environmental Policy Act (NEPA) and Executive Order 12114’, dated November 26, 2001. **(Modification 69)** The Contractor recognizes that JPL is a Government-owned facility and the Government has certain responsibilities pursuant to NEPA for the conduct of all programs funded through the Contract. Therefore, the Contractor shall establish and maintain a procedure for assisting the Government with the Government's efforts to comply with NEPA on programs, missions, and facility operations funded through the Contract. It is recognized that the Government retains all responsibility for NEPA compliance for all Government programs, missions, operations and tasks funded through the Contract and shall approve all documentation developed by the Contractor to assist the Government in accordance with this clause. **(Modification 51)**

(d) Executive Orders. Executive Orders applicable to work performed under this Contract are set forth as follows:

Executive Order 11514	Protection and Enhancement of Environmental Quality, dated March 5, 1970
Executive Order 11593	Protection and Enhancement of the Cultural Environment, dated May 13, 1971
Executive Order 11988	Floodplain Management, dated May 24, 1977
Executive Order 11990	Protection of Wetlands, dated May 24, 1977
Executive Order 12580	Superfund Implementation, Amended by 13016 and 12777, dated August 28, 1996
Executive Order 12898	Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, dated February 11, 1994
Executive Order 12941	Seismic Safety of Existing Federally Owned or Leased Buildings, dated December 1, 1994
Executive Order 13006	Locating Federal Facilities on Historic Properties in Our Nation's Central Cities, dated May 21, 1996
Executive Order 13007	Indian Sacred Sites, dated May 24, 1996
Executive Order 13045	Protection of Children From Environmental Health Risks and Safety Risks, dated April 21, 1997
Executive Order 13061	Federal Support of Community Efforts Along American Heritage Rivers, dated September 11, 1997
Executive Order	Coral Reef Protection, dated June 11, 1998

13089	
Executive Order 13112	Invasive Species, dated February 3, 1999
Executive Orders 13125 and 13216	Increasing Participation of Asian American and Pacific Islanders in Federal Programs, dated June 7, 1999
Executive Order 13132	Federalism, dated August 4, 1999
Executive Order 13150	Federal Workforce Transportation, dated April 21, 2000
Executive Order 13158	Marine Protected Areas, dated May 26, 2000
Executive Order 13160	Nondiscrimination on the Basis of Race, Sex, Color, National Origin, Disability, Religion, Age, Sexual Orientation, and Status as a Parent, in Federally Conducted Education and Training Program, dated June 23, 2000
Executive Order 13166	Improving Access to Services with Persons with Limited English Proficiency, dated August 11, 2000
Executive Order 13175	Consulting and Coordinating with Indian Tribal Governments, dated November 6, 2000
Executive Order 13186	Responsibility for Federal Agencies to Protect Migratory Birds, dated January 10, 2001
Executive Order 13196	Final Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, dated January 18, 2001
Executive Order 13211	Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use, dated May 18, 2001
Executive Order 13212	Actions to Expedite Energy-Related Projects, dated May 18, 2001
Executive Order 13221	Energy Efficient Standby Power Devices, dated July 31, 2001
Executive Order 13287*	Preserve America, dated March 3, 2003. (Modification 69)
Executive Order 13423**	Strengthening Federal Environmental, Energy, and Transportation Management, dated January 26, 2007

	(Modification 69)
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*Executive Order 13287, Preserve America, dated March 3, 2003. Documents referenced in EO 13287, unless expressly incorporated into the Contract, are applicable only as guidelines for the Contractor. The responsibilities defined within the EO 13287 for the Center personnel, up to and including Center Director, are understood to apply to the positions of those Contractor employees performing the specified functions. **(Modification 69)**

**Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 26, 2007, is accepted with the following understandings:

- (i) In Section 2(a) the energy reduction goals do not apply to the Goldstone Deep Space Communications Complex (Goldstone). The NASA Environmental Tracking System Energy Intensity Goal Excluded Facilities (NETS) lists the Goldstone Deep Space Network (DSN) as an excluded facility.
- (ii) In Section 2(b) it is understood that JPL does not purchase the power at Goldstone. It is purchased by NASA, not by JPL. NASA purchases the power from the U.S. Army (DOD), which purchases it from Southern California Edison. JPL cannot dictate that a certain percentage comes from renewable sources for the power provided to Goldstone.
- (iii) In Section 2(c) it is understood that Goldstone has removed water intensive landscaping and replaced it with xeroscaping. The water currently used at Goldstone is significantly processed water used when operating the antennas. An air conditioning modification to be completed in 2011 will remove the last of the evaporative cooling systems. After that further water reductions cannot be made without cutting DSN antenna operations.
- (iv) Documents referenced in EO 13423, unless expressly incorporated into the Contract, are applicable only as guidelines for the Contractor. The responsibilities defined within the EO 13423 for the Center personnel, up to and including Center Director, are understood to apply to the positions of those Contractor employees performing the specified functions.
(Modification 69)

H-9 ENERGY MANAGEMENT

(a) Energy and Water Conservation. The Contractor shall comply with the energy efficiency and water conservation goals and requirements of the National Energy Conservation Policy Act 42 USC 8251-8287, as amended by the Energy Policy Act of 1992, P.L. 102-486, and of Executive

Order 13123, Greening the Government Through Efficient Energy Management, dated June 3, 1999. The Contractor shall:

(1) Set annual goals to reduce building energy usage per gross square foot from the FY 1985 baseline. The annual goals shall be indexed to the Federal goals to achieve a 30 percent reduction by the end of FY 2005 and a 35 percent reduction by the end of FY 2010.

(2) Set annual goals to reduce energy-intensive facility usage per gross square foot from the 1990 baseline. The annual goals shall be indexed to the Federal goals to achieve a 20 percent reduction by the end of FY 2010.

(3) Conduct comprehensive energy and water conservation audits of approximately 10 percent of facility gross square footage each year until all NASA-owned or leased facilities have been audited.

(4) To the extent that appropriate funds and alternative financing methods are available, begin implementing cost-effective energy and water conservation measures identified in facility audits within 180 days of audit completions.

(5) Provide quarterly energy and water consumption reports, annual Office of Management and Budget Circular A-11 Energy and Transportation Efficiency Management budget exhibits, and an annual energy management progress assessment report to NASA Headquarters.

(6) Minimize the life cycle cost of new and renovated facilities by utilizing sustainable design and construction methods where cost effective. The Contractor is required to comply with either the current Federal Energy Building Code 10 CFR 434 or the State of California Title 24 Energy Efficiency Code, whichever is more stringent, for all facility design and construction work.

(b) NASA Issuances Applicable to Energy and Water Conservation. The provisions of the current NASA Policy Directive (NPD) and NASA Procedures and Guidelines (NPG) documents below, in addition to other environmental and facilities management documents incorporated elsewhere, shall be used for all work performed under this provision.

(1) NPG 8570.1, Energy Efficiency and Water Conservation Technologies and Practices, dated March 15, 2001

(2) Presidential Memorandum on Energy Conservation at Federal Facilities and Related Information, dated May 3, 2001

(c) Energy and Water Conservation Reports. The Contractor shall provide all reports required by Federal, State, and local regulations, Executive Orders, NPD's and NPG's within the timeframe established by the regulatory requirement, Executive Order or NASA.

H-10 PROVISION OF OCCUPATIONAL HEALTH SERVICES

The Contractor shall provide occupational health services of a scope which shall include: (a) treatment of on-the-job illnesses and injuries; (b) post-offer/ pre-employment and periodic health examinations in accordance with Contractor's established practices; (c) provisions for medical examinations as specified in OSHA health standards; (d) operation of an employee assistance program for counseling regarding personal, work related mental health, and alcohol/chemical dependency problems; and (e) emergency medical assistance. The program shall also implement the risk protection measures and limits specified in Section 3.3 of NPG 1820.1, "Hearing Conservation". Additionally, NPG 1800.2A, NASA Occupational Health Program should be used as a best practices standard for services offered within the occupational health arena.

H-11 PUBLIC AFFAIRS PROGRAM AND RELEASE OF INFORMATION TO THE PUBLIC

- (a) General. The Contractor shall observe the policies and procedures agreed to by the parties hereto regarding the conduct of its public affairs program and the release of information to the public relative to work performed under this Contract or matters relating to NASA programs.
- (b) Consultation. The Contractor shall consult freely with the NASA Associate Administrator for Public Affairs or his/her designee for guidance in applying these procedures.
- (c) Attachment B. Attachment B sets forth the policies and procedures agreed to by the parties.

H-12 EVALUATION OF PROPOSALS RECEIVED FROM NASA

- (a) General. Whenever the Contractor performs an evaluation of a proposal received from NASA, the Contractor agrees that JPL personnel participating in the evaluation shall not reveal any information concerning the proposal or the evaluation of the proposal to anyone not also participating in the evaluation. Additionally, if information is disclosed to others participating in the evaluation, that disclosure shall only be to the extent that the information is required in connection with the evaluation. The parties understand that although this restriction on disclosure does not apply to information that has been previously made available to the public or disclosed publicly, JPL personnel cannot disclose the fact that such public information is part of the proposal.
- (b) The JPL employees involved in evaluating proposals shall sign the "Agreement and Conditions for Evaluation of Proposals" in Attachment G of this Contract prior to receipt of proposals.
- (c) The Contractor shall comply with NFS 1815.609 during its evaluation of all unsolicited proposals.
- (d) Completion. Upon completion of the evaluation of a proposal, the Contractor shall return to NASA all copies of the evaluated proposal furnished by NASA and remaining in the possession of the Contractor.

(e) Rights in Data. Evaluations by the Contractor under this Schedule provision shall not be subject to FAR 52.227-14, Rights in Data--General (ALT II, III, V) and shall be used by the Government solely for reference in arriving at its own independent evaluation; provided, however, that if subsequently the Contractor performs work under this Contract as the result of the proposal evaluated under this provision, then and in that event any data included in the evaluation of that proposal which is necessary for, or is used in, the performance of such work shall become subject to FAR 52.227-14, Rights in Data--General (ALT II, III, V).

H-13 SUBCONTRACT NEW TECHNOLOGY AND PATENT FOLLOW-UP

(a) In accordance with procedures mutually agreed upon, the Contractor shall:

(1) General. Review the technical data submitted for all subcontracts, and the work delivered thereunder, which contain either the New Technology clause or other patent rights clause as required by paragraph (g) of NFS 1852.227-70, New Technology, or paragraph (h) of FAR 52.227-11, Patent Rights--Retention by the Contractor (Short Form). Any "Reportable Items" of New Technology, or any "Subject Invention", as defined in paragraph (a) of NFS 1852.227-70 which are identified by the Contractor shall be noted and, if not reported by the subcontractor, the Contractor shall request the subcontractor to make the necessary reports.

(2) Subcontract Copies. Furnish to the Contracting Officer upon request a copy of a subcontract or subcontracts and a copy of all technical data submitted under such subcontract or subcontracts.

(3) Withholding of Payment. Where the "New Technology" clause is included in the subcontract, withhold final payment to the subcontractor pursuant to the withholding provisions of that clause until satisfied that the subcontractor has complied with the provisions of such clause, or, in the case of a disagreement as set forth in (b) below, the Contracting Officer has made a determination that the subcontractor has complied with the provisions of the New Technology clause and the Contractor has received authorization from the Contracting Officer for the release of such withheld funds.

(b) Subcontract Disagreements. In the event that there is a disagreement between the Contractor and a subcontractor as to whether any invention, discovery, improvement or innovation has been or should be reported, or whether such invention, discovery, improvement or innovation has been properly reported, the Contracting Officer upon notice shall thereupon assume responsibility for any further follow-up with the subcontractor as to such invention, discovery, improvement or innovation, and for determining compliance by the subcontractor with the New Technology or other patent rights clause.

H-14 PATENT AND NEW TECHNOLOGY SERVICES

The Contractor agrees:

(a) Patent Services. With respect to Patent Services:

(1) To utilize qualified patent personnel to prepare, at the request of the Contracting Officer, detailed technical descriptions in patent specification form on inventions made by the Contractor's employees and by subcontractors' employees in the performance of work under this contract or subcontracts issued thereunder provided said subcontractors' employees' inventions have been reported to the Contracting Officer and said inventions were subject inventions at the time of request;

(2) To utilize qualified patent personnel to prepare, at the request of the Contracting Officer, responsive evaluations of Patent Office Examiners' actions taken on patent applications filed on inventions made by the Contractor's employees and by subcontractors' employees in the performance of work under this contract provided such applications on said subcontractors' employees' inventions relate to inventions, title to which is vested in the Government;

(3) To assist NASA patent personnel in evaluation of Patent Office Examiners' actions taken on patent applications filed on inventions made by the Contractor's employees in the performance of work under this contract;

(4) To assist in the evaluation of reportable items related to this prime contract and subcontracts hereunder;

(5) To prepare invention award abstracts, at the request of the Contracting Officer, on those reportable items determined to be inventions and on which patent applications have been filed or prepared.

(b) New Technology Services. With respect to New Technology Services:

(1) To assist in the evaluation of reportable items relating to this contract and subcontracts hereunder for possible publication in the NASA Tech Briefs magazine, and evaluation of potential uses for New Technology;

(2) To furnish available backup materials assembled in a Technical Support Package (TSP) on all reportable items which are made by Contractor or subcontractor employees as defined by NFS 1852.227-70 and FAR 52.227-11 in this contract entitled "New Technology" and "Patent Rights--Retention by the Contractor" (Short Form) respectively and which have been published as a Tech Brief;

(3) To furnish written replies to inquiries from NASA, other Government organizations, Government contractors and private individuals or industries, relating to reportable items incorporated in said Tech Briefs utilizing only information in possession of the Contractor or made available to the Contractor by the Contracting Officer.

(4) Perform such other work and services as may be provided by a task order issued by the Contracting Officer.

H-15 NASA OFFICES

(a) The Contracting Officer may require the Contractor to assign adequate space and facilities for NASA personnel resident at JPL. The Contractor shall also provide office supplies and equipment, light, power, heat, communications, information technology support and such other support services as may be required for the operation of such offices as directed by the Contracting Officer.

(b) In specific instances, the Contracting Officer may also require the Contractor to provide communication and information technology support for NASA personnel at remote sites in the Southern California area.

H-16 PROPERTY RIGHTS IN RECORDS

(a) Government Records.

(1) Except as provided in (b) of this clause, all records acquired, generated or maintained by the Contractor in its performance of this Contract shall be the property of the Government and shall be delivered to the Government or otherwise disposed of by the Contractor either as the Contracting Officer or the NASA Records Officer may from time to time direct or, as the Contracting Officer shall direct upon completion or termination of the contract. This sub-paragraph (a) shall not apply to documents owned by third parties that are in the possession of the Contractor (e.g. documents containing trade secrets of third parties).

(2) To the extent Government records are in the possession of the Contractor (e.g., Government-owned, Contractor-held), the Government shall have full and prompt access to the same. The Government's full and prompt access to data or records generated (or otherwise produced or prepared) at, by, or for JPL endure irrespective of form or medium of the data and apply to all such data or records without regard to the date or origination of such data or records, and without regard to ownership.

(3) Government records include, not only the deliverables specified by the Contract, including any Task Order (e.g., scientific and technical data, information, reports, or records), but all books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by the Contractor in performance of this Contract. For purposes of this clause, Government records also includes any supporting or backup data used to create the deliverables, and related scientific, technical, health, safety, security, environmental, administrative, and management data or information.

(4) Government records include, but are not limited to, all environmental, occupational health, safety, and security records generated during the performance of Government funded activities at, by, or for JPL or for NASA related activities. Such records will be maintained at JPL and are the property of the Government.

(5) The Government shall have unlimited rights in information incidental to Contract administration including administrative and management information created under the Contract by the Contractor and specified for delivery to NASA in performance of the Contract, expressly excluding Confidential Contractor financial information. The Government shall also have the

right to release such administrative and management information to any third party to satisfy the Government's requirements.

(b) Contractor Records. Not all records at JPL are Government records; NASA recognizes the right of the Contractor to retain ownership to certain records.

(1) Contractor-owned records include:

(i) Personal notes, logs, memoranda, or other similar documents created by an employee of the Contractor for the employee's own personal convenience and which are not intended for distribution through the normal course of the Contractor's business; and legal records, including legal opinions, litigation files, and documents covered by the attorney-client (i.e., facts confidentially communicated to an attorney from a client for the purpose of seeking legal assistance and opinions given by an attorney based on those facts) and documents covered by the attorney work product privileges;

(ii) Employment-related records containing personally identifying information concerning employees (e.g., personnel, payroll, and medical records maintained on individual employees of the Contractor);

(iii) Employment-related records not containing personally identifying information concerning employees;

(iv) Confidential Contractor financial information, and correspondence between the Contractor and other segments of the Contractor located away from the NASA facility (i.e., the Contractor's corporate headquarters); and

(v) Contractor Procurement-related records (confidential financial information and correspondence obtained by the Contractor for use in its subcontracts; source selection and other confidential, pre-decisional, or similar documents relating to the Contractor's deliberative process in selecting subcontractors).

(vi) Pre-decisional documents that are a direct part of the Contractor's deliberative process in that they make recommendations or express opinions on matters of policy directly affecting the Contractor's business operations.

(2) In accordance with the Privacy Act of 1974, 5 U.S.C. 552a (P.L. 93-579) and implementing NASA Regulations (14 CFR 1212, Privacy Act - NASA Regulations), the Contractor shall, upon written direction from the Contracting Officer, maintain one or more separate "Systems of Records" on individuals in order to accomplish the NASA functions.

(c) Rights in Data. Ownership of documents by either the Government or the Contractor shall not in any way affect the respective rights the parties may otherwise have to data contained on or in the documents under other provisions in the Contract.

(d) Contract Completion or Termination.

(1) In the event of completion or termination of this Contract, the Contractor agrees to leave Government-owned data at the JPL, and upon request of the Government, the Contractor

agrees to deliver such Government-owned data to NASA or its designees, including successor contractors.

(2) In the event of completion or termination of this Contract, copies of any of the Contractor-owned records identified in paragraph (b)(1)(iii), and (v) of this clause, and with the consent of the employees, (b)(1)(i) and (ii), upon the request of the Government, shall be delivered to NASA or its designees, including successor Contractors. Upon delivery, title to such records shall vest in NASA or its designees, and such records shall be protected in accordance with applicable federal laws (including the Privacy Act), as appropriate.

(e) Inspection, Copying, and Audit of Records.

(1) All records acquired or generated by the Contractor under this contract in the possession of the Contractor, except those described at paragraph (b)(1)(i), (ii) and (vi) of this clause, shall be subject to inspection, copying, and audit by the Government or its designees at all reasonable times, and the Contractor shall afford the Government or its designees reasonable facilities for such inspection, copying, and audit; provided, however, that upon request by the Contracting Officer, the Contractor shall deliver such records to a location specified by the Contracting Officer for inspection, copying, and audit.

(2) Contractor Records described in paragraph (b)(1)(ii) of this clause shall be subject to (e)(1) of this clause, but subject to the following conditions:

(i) With regard to personally identifying information that can be redacted from the record, the Contractor shall provide the Government access to the record as expeditiously as possible.

(ii) The Contractor acknowledges that the Government may, for purposes of health, medical, safety, security, or law enforcement, need access to records containing information identifiable to individual employees of the Contractor. With regard to these records, the Contractor shall provide the Government access to the record in accordance with applicable law, legal process, or subpoena. The Government shall use such records in accordance with applicable federal laws (including the Privacy Act), as appropriate.

(iii) The parties agree that it is in their mutual interest for the Contractor to conduct self-assessments that are kept confidential to the Contractor. The Contractor agrees that it will notify NMO of any self-assessments that are initiated and will promptly brief NMO on actions intended to be taken as a result of such self-assessments. Upon completion, the Contractor will report and certify which actions were taken. It is the intent of the Government and the Contractor, however, that any record documenting the self-assessment be strictly confidential and not be available to the Government or any third party without the express consent of the Contractor.

In those instances where a basis for asserting a joint defense privilege exist, the Contractor will provide attorney/client privileged or work product information to counsel for NASA pursuant to a joint defense agreement.

(3) Without limiting the generality of the foregoing, the Contractor may use, make, or retain copies of Government records to the extent necessary to perform work generally described in Section C of this Contract.

(f) Records Retention and Storage.

(1) Government Owned, Contractor-held records shall be maintained by the Contractor in accordance with the instructions set forth in NPD 1440.6G, NASA Records Management, dated December 12, 2002, and NPR 1441.1D, NASA Records Retention Schedules (w/Change 3, 1/31/06). NPD 1440.6G and NPR 1441.1D are acceptable with the understanding that the responsibilities defined within apply to the positions of those JPL employees performing the specified functions. Documents referenced in NPD 1440.6G and NPR 1441.1D are not applicable unless expressly incorporated into the Contract. **(Modification No. 33)**

(2) The Contractor shall ensure that Contractor-owned records can be segregated from Government-owned, Contractor-held records.

(3) The NASA Record Retention Schedules (i.e., NPR 1441.1D (w/Change 3, 1/31/06) **(Modification No. 33)**) are applicable for the classes of records described therein for Government records. The Contractor shall provide container lists for all storage boxes containing such records in accordance with secondary identification codes (e.g. 1150) for files falling within the 1000 series and primary identification codes (e.g. 2100) for files falling within the 2000 through 9000 series as set forth in the NASA Record Retention Schedules when files are sent to Record Storage. The Contractor will implement NPR 1441.1D (w/Change 3, 1/31/06) **(Modification No. 33)** for records disposition.

(4) Any such documents delivered to and stored by the Government may, during their period of storage, be made available to the Contractor for inspection, copying and use, upon its request. The Contractor shall submit requests for such documents stored by the Government through the Contracting Officer for processing.

(5) Contractor shall provide NASA personnel full access to the JPL Archives.

(6) The Contractor shall submit to the Contracting Officer on a semiannual basis the latest inventory of the catalogued records in the JPL archives and to the NASA Records Officer statistics and reports concerning records under the Contractor's control as requested by the NASA Records Officer of all NASA Installation records managers.

H-17 SERVICE CONTRACTS

The Contractor agrees, except to the extent that such subcontracts are exempted by the regulations of the Secretary of Labor or FAR 52.244-6, Subcontracts for Commercial Items, to insert the following clause with such changes as are necessary to appropriately identify the parties in all subcontracts as applicable: FAR 52.222-41 Service Contract Act of 1965--as amended (MAY 1989).

H-18 LIMITATION OF LIABILITY

The provisions of FAR 52.246-24, Limitation of Liability--High Value Items, shall apply to all items delivered to the Government under this Contract, which have a unit cost exceeding \$100,000. The provisions of FAR 52.246-23, Limitation of Liability, shall apply to all other items delivered to the Government under this Contract.

H-19 SUPPORT FOR HISTORICALLY BLACK COLLEGES AND OTHER MINORITY UNIVERSITIES

As part of its program of supporting research, the Contractor shall develop relationships and involvement with Historically Black Colleges and Universities, and other Minority Universities.

H-20 SUBCONTRACTOR RESPONSIBILITY FOR GOVERNMENT PROPERTY

(a) Where the Contracting Officer consents to or approves, pursuant to Clause I-5, Subcontracts (FAR 52.244-2) (Aug 1998), (Alternate I) (Aug 1998) (Deviation), subparagraph (c)(1)(viii), a standard General Provision or Standard Alteration regarding Government property which relieves the subcontractor, to some stated extent, from risk or responsibility for Government property while in the subcontractor's possession and control, then such consent or approval shall constitute advance approval by the Contracting Officer for the purpose of subparagraph (g)(4) of FAR 52.245-5, Government Property (Cost Reimbursement, Time-and-Material, Labor-Hour Contracts).

H-21 CONSTRUCTION CLAUSES

The following clauses, suitably modified to identify the parties, shall be included by the Contractor in subcontracts for construction as prescribed in FAR Part 22 for work within the United States. The Contractor shall also require the insertion of said clauses in all lower tier subcontracts for construction that fall within the FAR Part 22 prescriptions. Such clauses are:

FAR Reference No. Title

- | | | |
|-----|-----------|--|
| (a) | 52.222-6 | Davis-Bacon Act (FEB 1995) |
| (b) | 52.222-7 | Withholding of Funds (FEB 1988) |
| (c) | 52.222-8 | Payrolls and Basic Records (FEB 1988) |
| (d) | 52.222-9 | Apprentices and Trainees (FEB 1988) |
| (e) | 52.222-10 | Compliance with Copeland Act Requirements (FEB 1988) |
| (f) | 52.222-11 | Subcontracts (Labor Standards) (FEB 1988) |
| (g) | 52.222-12 | Contract Termination--Debarment (FEB 1988) |
| (h) | 52.222-13 | Compliance with Davis-Bacon and Related Act Regulations (FEB 1988) |
| (i) | 52.222-14 | Disputes Concerning Labor Standards (FEB 1988) |
| (j) | 52.222-15 | Certification of Eligibility (FEB 1988) |
| (k) | 52.222-16 | Approval of Wage Rates (FEB 1988) |

- (l) 52.222-27 Affirmative Action Compliance Requirements for Construction (FEB 1999)

H-22 AUDIT-NEGOTIATION - ACCESS TO COMPUTERS

In applying the provisions of FAR 52.215-2 (Alternatives I and II), Audit and Records--Negotiation, it is understood and agreed that this clause with regard to computer access, pertains primarily to access to information that is stored on computers used at JPL rather than access to the computers themselves. When the Contractor is required to provide information pursuant to the requirements of this clause which is on computers used by JPL personnel it shall therefore be provided in any media or form normally used by the Contractor and which can be utilized by the auditors on their computers. At their option, Government auditors may be present when the Contractor extracts, compiles or otherwise processes information or test transactions on or from computers used by JPL personnel for the purpose of providing information to Government auditors. Government auditors will also be provided, at their option, access to physically inspect and inventory computer systems, equipment, and software used at JPL. This clause is applicable to all computers used at JPL, regardless of who owns the computers.

H-23 COMPETITION IN SUBCONTRACTING

In applying FAR 52.244-5, Competition in Subcontracting, subcontracts are to be made on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the Contract. The Contractor shall document the file regarding the nature and extent of the competition obtained, or if competition was impracticable, reasonably explain and provide data supporting such conclusion. The file shall include a noncompetitive justification for procurements anticipated to be \$1,000,000 or more, which did not require a noncompetitive source board or receive a waiver. The Contractor shall send the Contracting Officer an information copy of all noncompetitive source board waivers exceeding \$5,000,000 promptly upon issuance. The Contracting Officer shall advise the Contractor of any waiver concerns within five working days. Upon noncompetitive source board evaluation of a procurement that exceeds \$10,000,000, the Contractor shall forward the selection memoranda to the Contracting Officer for concurrence.

H-24 APPLICATION OF CROSS-WAIVERS OF LIABILITY

In applying the NFS Clauses 1852.228-72, 1852.228-76, and 1852.228-78, the Contractor shall incorporate the appropriate clause into subcontracts, which are for \$100,000 or more when the work to be performed is in support of "Protected Space Operations" as defined in paragraph (b)(5) of each clause.

H-25 ADVISORY AND ASSISTANCE SERVICES

- (a) In accordance with the policies set forth in FAR Part 37.203, this Contract may be used to obtain advisory and assistance services, subject to the restrictions set forth in (b) below.

- (b) As noted in FAR 37.203(c), advisory and assistance services shall not be:
- (1) Used in performing work of a policy, decision-making, or managerial nature that is the direct responsibility of agency officials.
 - (2) Used to bypass or undermine personnel ceilings, pay limitations, or competitive employment procedures;
 - (3) Contracted for on a preferential basis to former Government employees;
 - (4) Used under any circumstances specifically to aid in influencing or enacting legislation; or
 - (5) Used to obtain professional or technical advice that is readily available within the agency or another Federal agency.

H-26 SUBCONTRACTOR PROGRESS PAYMENTS

In making progress payments to subcontractors and suppliers on fixed price subcontracts, the Contractor shall use the policies, standards, and procedures of Subpart 32.2 and 32.5 of the FAR and Subparts 1832.2 and 1832.5 of the NASA FAR Supplement (NFS) as guidelines.

H-27 ADDITIONAL NASA REQUIREMENTS

- (a) The following government policies are incorporated in the Contract. In performing work under this Contract, the Contractor shall comply with the requirements of these government policies, or parts thereof. Additions, modifications, or deletions of specific requirements shall be in accordance with G-14 (NASA Issuance System and Government Policies) of this Contract.
- (1) NPD 8020.7E - Biological Contamination Control for Outbound and Inbound Planetary Spacecraft, dated February 19, 1999
 - (2) NPD 1360.2 - Initiation and Development of International Cooperation in Space and Aeronautics Programs, dated April 16, 1999
 - (3) NPG 4310.1 - Identification and Disposition of NASA Artifacts, dated March 16, 1999. JPL's own functional delegations and operational personnel appointments will be responsible for the duties of Agency personnel.
 - (4) NPD 8730.1 - Metrology and Calibration, dated May 22, 1998
 - (5) NPD 7500.2 - NASA Technology Commercialization Policy, dated March 24, 2000 is hereby added with the following clarifications and conditions:

(i) The definition of "electronic commerce" as used in Section 1, Policy is as follows: "1. To establish broad, interactive communications between NASA and industry

regarding partnering opportunities; and 2. as an effective management tool for both NASA and industry through the transmission of programmatic information such as metrics.”

- (ii) Section 7 of NPD 7500.2 is not applicable
- (6) NPD 2530.1E, Monitoring or Recording of Telephone or Other Conversations, dated August 29, 2002
- (7) NPD 2110.1E, Foreign Access to NASA Technology Transfer Materials, dated December 26, 2001
- (8) NPD 2570.5B, Radio Frequency Spectrum Management, dated March 18, 1998
- (9) NPD 2800.1, Managing Information Technology, dated March 23, 1998
- (10) NPG 2800.1, Managing Information Technology, September 17, 1998 subject to the following conditions:
 - (i) Sections 2.2.3 and 2.2.4 are not applicable.
 - (ii) Section 2.5 is not applicable
- (11) NPG 8000.4, Risk Management Procedures and Guidelines, dated April 25, 2002
- (12) NPD 8010.2C, Use of the Metric System of Measurement in NASA Programs, dated July 20, 2000
- (13) NPG 8020.12B, Planetary Protection Provisions for Robotic Extraterrestrial Missions, dated April 16, 1999
- (14) NPD 8900.4C, NASA Use of Global Positioning System Precise Positioning Service, dated April 27, 1999
- (15) NPD 8710.2C, NASA Safety and Health Program Policy, dated April 24, 2002
- (16) NPD 8710.3, NASA Policy for Limiting Orbital Debris Generation, dated May 29, 1997
- (17) NASA-STD 8719.8, Expendable Launch Vehicle Payload Safety Review Process Standard, dated June 23, 1998
- (18) NPG 8715.1, NASA Safety and Health Handbook Occupational Safety and Health Programs, dated August 9, 1999
- (19) NPG 8735.1A, Procedures For Exchanging Parts, Materials, and Safety Problem Data Utilizing the Government-Industry Data Exchange Program and NASA Advisories, dated August 22, 2002
- (20) NASA-STD-8739.1, Workmanship Standard for Staking and Conformal Coating

of Printed Wiring Boards and Electronic Assemblies, dated August 6, 1999

- (21) NASA-STD-8739.2, NASA Workmanship Standard for Surface Mount Technology, dated August 31, 1999
- (22) NASA STD 8739.3, Soldered Electrical Connections, dated January 18, 2001
- (23) NASA STD 8739.4, Crimping, Interconnecting Cables, Harnesses, and Wiring, dated February 9, 1998
- (24) NASA STD 8739.5, Fiber Optic Terminations, Cable Assemblies, and Installation, dated February 9, 1998
- (25) NSS/WS-1740.10, Safety Standard for Underwater Facility and Non-Open Water Operations, dated May 28, 1997
- (26) NSS 1740.12, NASA Safety Standard for Explosives, Propellants and Pyrotechnics, dated August 1993
- (27) NSS 1740.15, Safety Standard for Oxygen and Oxygen Systems, dated January 1996
- (28) NSS 1740.16, Safety Standard for Hydrogen and Hydrogen Systems, dated February 12, 1997
- (29) NPG 8715.2, NASA Emergency Preparedness Plan Procedures and Guidelines, dated December 22, 1999
- (30) NASA-STD-8719.13a, Software Safety, dated September 15, 1997
- (31) NPD 8730.3, NASA Quality Management System Policy (ISO 9000), dated June 8, 1998
- (32) NPD 8730.4, Software Independent Verification and Validation (IV&V) Policy, dated August 1, 2001
- (33) NPD 1000.5, Policy for NASA Acquisition, dated: January 15, 2009. Documents referenced in NPD 1000.5, unless expressly incorporated into the Contract, are applicable only as guidelines for the Contractor. The responsibilities defined within the NPD, 1000.5 for the Center personnel, up to and including Center Director, are understood to apply to the positions of those Contractor employees performing the specified functions. **(Modification 69)**

H-28 CLAUSE FLOWDOWN REQUIREMENT

(a) Although the following contract clauses are not applicable to the Contractor, the Contractor shall incorporate these clauses, when appropriate and as suitably modified to identify the parties, into its subcontracts. This provision only applies to new subcontracts the Contractor enters into after the Contracting Officer's approval of standard subcontract terms and conditions in accordance with (c) below. Additionally, this provision will not apply to any subcontract when the solicitation for the subcontract was issued prior to the Contracting Officer's approval of the standard terms and conditions in accordance with subparagraphs (b) and (c). This paragraph (a) does not apply to subcontracts for commercial items as defined in FAR Section 2.101.

(1) FAR 52.215-15, Pension Adjustments and Asset Reversions (DEC 1988)

(2) FAR 52.215-17, Waiver of Facilities Capital Cost of Money (OCT 1997)
(where a subcontract does not include cost of money as a proposed cost)

(3) FAR 52.215-18, Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other than Pensions (OCT 1997)

(4) FAR 52.229-8, Taxes - Foreign Cost-Reimbursement Contracts (MAR 1990)

(5) FAR 52.245-16, Facilities Equipment Modernization (APR 1985)

(6) FAR 52.249-14, Excusable Delays (APR 1984)

(7) NFS 1852.227-85, Invention Reporting and Rights - Foreign (APR 1986)

(b) The flowdown requirements of FAR 52.244-6 shall apply to commercial subcontracts. In addition, the Contractor shall insert the following clause in all subcontracts for commercial items which are funded under the American Recovery and Reinvestment Act (Recovery Act): FAR 52.203-15, Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (MAR 2009). **(Modification No. 64)**

(c) Additionally, Sections H and I of this contract may contain other contract flowdown requirements that are not included in the Contractor's previously approved standard subcontract terms and conditions. In accordance with paragraph (d) below, the Contractor shall update its standard subcontract terms and conditions to reflect these changes. The Contractor shall continue to use its previously approved subcontract terms and conditions until the Contractor's new subcontract term and conditions containing the contract flowdown requirements are approved by the Contracting Officer. Additionally, the previously approved subcontract terms and conditions will apply to all solicitations for subcontracts issued prior to the Contracting Officer's approval of the new standard subcontract terms and conditions.

(d) The Contractor shall submit, within 90 days after the effective date of this contract, or modifications thereto that change the subcontract flowdown requirements of this contract, its revised standard terms and conditions incorporating the changes required by paragraphs (a), (b), and (c) above for Contracting Officer approval. Once approved by the Contracting Officer, the Contractor shall incorporate the above provisions in its subcontracts consistent with the approved standard terms and conditions.

H-29 PRINTING, DUPLICATING, AND COPYING

(a) The terms "documentation" referred to in paragraph (a), "printing" referred to in paragraph (b), and "production units" referred to in paragraph (c) of NFS 1852.208-81, Printing and Duplicating, pertain solely to "Government publications". "Government publications" is defined as (1) reports intended primarily for internal use by the Government and (2) reports or other materials of the type that the Government itself distributes to the public under an agency program.

"Government publications" shall, unless subject to exemption under applicable regulations, be printed according to the requirements of 48 CFR Subpart 8.8 even though the distribution of these reports and materials may be effectuated by the Contractor for the Government.

(b) Examples of documents which are "Government publications" include, but are not limited to:

(1) publications released by the Contractor or a subcontractor to the public for the purpose of promoting NASA or a Government agency sponsor;

(2) deliverable final reports but not interim drafts of such reports;

(3) deliverable review board presentations and conclusions in which a majority of the review board membership consists of Government representatives.

(c) Examples of documents that are not "Government publications" include, but are not limited to:

(1) publications for internal JPL usage and communication such as the JPL Telephone Directory and the Universe newspaper;

(2) public information, education and public service documents, and award certificates printed for JPL rather than Government usage, including those which may contain an incidental reference to sponsorship by NASA or another Government agency;

(3) publications for which the printing costs are not paid for by the Government;

(4) non-deliverable reports provided to the Government for informational purposes which are suitable for publication in academic, technical or professional journals and similar publications; and

(5) review board presentations and conclusions in which a majority of the formal review board membership consists of Contractor or subcontractor representatives, where Government attendance is only incidental, and the contract does not expressly require Government approval of the proceedings.

(d) Requests for waivers to permit printing of "Government publications" other than via the process defined in 48 CFR Subpart 8.8 in cases of exigencies or other appropriate circumstances

shall be submitted by the JPL Installation Printing Management Officer to the NASA Printing Management Officer through the Contracting Officer.

(e) The Contractor will implement NPD 1490.1F, NASA Printing, Duplicating, Copier, Forms, and Mail Management, dated June 29, 2001, and NPG 1490.5A, NASA Procedural Guidance for Printing, Duplicating and Copying Management, dated July 8 1997 for all printing, duplicating, copying, forms and mail management.

H-30 CLAUSES APPLICABLE ON A TASK ORDER BASIS

The parties agree that certain contract clauses do not apply to the entire contract and, instead, apply to the extent that they are required by sponsors on specified task orders. The following is an enumeration of these clauses and the guidelines for their applicability:

(a) FAR 52.242-12, Report of Shipment (RESHIP) (JUL 1995) shall be included in task orders which involve shipments of classified material; protected sensitive, and protected controlled material; explosives; poisons, classes A&B; or when a truckload/carload shipment of supplies weighing 20,000 pounds or more, or a shipment that occupies the full visible capacity of a railway car or motor vehicle are required for the task; or radioactive materials requiring the use of a III bar label;

(b) FAR 52.223-3, Hazardous Materials Identification and Material Safety Data, (JAN 1997) (ALT I)(JUL 1995) shall be included in task orders which include an identified list of hazardous materials for delivery.

(c) Higher level quality requirements shall be included in a task order when the higher-level quality requirements are deemed appropriate by NASA. An example is NPR 8705.5, Probabilistic Risk Assessment (PRA) Procedures for NASA Programs and Projects, dated July 12, 2004. **(Modification 69)**

H-31 THE COST ACCOUNTING STANDARDS CLAUSE -- JPL SUBCONTRACTORS

(a) In regard to applicable subcontracts entered into under this contract, as defined in FAR 52.230-2, Cost Accounting Standards, the following shall apply: First-tier subcontractors shall be required to submit their Disclosure Statements either to the Contractor or to the cognizant Government Contract Administration Officer. However, if a subcontractor has previously submitted its Disclosure Statement to another Government Administrative Contracting Officer the Subcontractor may satisfy that requirement by certifying to the Contractor the date of the Statement and the address of the Contracting Officer administering the contract.

(b) In any case where a subcontractor lower than the first-tier determines that the Disclosure Statement information is privileged and confidential and declines to provide it to a higher tier subcontractor, the first-tier subcontractor may authorize direct submission of that lower-tier subcontractor's Disclosure Statement to the same Government offices to which the first-tier subcontractor was required to make submission of its Disclosure Statement.

(c) If a subcontractor is a business unit which, pursuant to 48 CFR Subpart 9903.201-2(b), is entitled to elect modified contract coverage and to follow Standard 9904.401 (Consistency in Estimating, Accumulating, and Reporting Costs) and Standard 9904.402 (Consistency in Allocating Costs Incurred for the Same Purpose), CFR Subpart 9905, and CFR Subpart 9906, all of which standards are referenced in 48 CFR Subpart 9903.201-2(b), the clause at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices, shall be inserted in lieu of the clause prescribed in paragraph (d) of FAR 52.230-2, Cost Accounting Standards, of this Contract.

H-32 PROTECTION OF SCIENTIFIC AND TECHNICAL INFORMATION OF NATIONAL INTEREST

(a) NASA requires that its scientific and technical information that may impact the United States' national economic and/or national security interests and/or U.S. competitiveness be protected. Consistent with these concerns, the Contractor shall comply with the terms of this Contract and with United States laws and regulations in the dissemination of technical information. The Contractor shall control access to scientific and technical information of national interest, which it handles, processes, stores or transmits electronically or manually consistent with the following policies:

(1) NPG 1620.1B, Security Procedures and Guidelines, dated September 13, 2002 as accepted in H-37;

(2) NPR 2810.1A, Security of Information Technology, dated May 16, 2006, as accepted in H-37; (**Modification No. 43**)

(3) NPD 2190.1, NASA Export Control Program, dated May 24, 2001

(i) This issuance is incorporated with the understanding that NPG 2190.X that is referenced within the body of the NPD does not apply;

(4) NPD 2220.5E, Management of Scientific and Technical Information (STI), dated August 5, 1997

(i) This issuance is incorporated with the understanding that NPG 2200.2A as referenced within the body of the NPD is only applicable, as accepted in C-1(e)(8), this Contract, and;

(5) Applicable U.S. laws and regulations.

H-33 END OF CONTRACT OPTIONS

(a) Prior to the end of the Contract's term, the Government may elect to proceed with one or more of the following end of Contract options:

(1) An orderly phase-down and closure of the FFRDC,

- (2) A transfer of sponsorship of the FFRDC to another sponsor;
 - (3) A transition of the FFRDC to another contractor, or
 - (4) A renewal of the Contract with the Contractor.
- (b) This provision does not alter the Government's right to terminate the contract pursuant to the termination provisions of the contract, as the circumstances dictate.

(c) Phase-down.

(1) Notice. The Contracting Officer will provide the Contractor with notification of its election to phase-down the FFRDC prior to the expiration date of the Contract.

(2) Phase-down Period. The phase-down period will commence at the end of the Contract term. The phase-down shall not exceed two years unless the parties mutually agree to an extension. The Contract term set forth in Section F shall be extended to coincide with the phase-down period and any extensions thereof.

(3) Terms and Conditions. The terms and conditions in this contract shall be applicable during any phase-down period except that the Scope of Work set forth in Section C will be revised to incorporate any phase-down plan that the parties agree to implement as set forth in subparagraph (c)(6) below.

(4) Phase-down Costs. NASA will reimburse the contractor for phase-down costs that are related to the orderly shut down of the FFRDC and close out of the Contract provided they are reasonable, allocable and allowable under cost principles identified in Clause B-5 (Allowable Costs) of the Contract. This may include costs related to the disposal of assets and reassignment, and assumption or settlement of accrued liabilities incurred by the contractor during the course of performance. The Government recognizes that all such costs may not be identified prior to the expiration of the phase-down period. NASA will reimburse the Contractor for such costs that are identified after contract expiration only to the extent they meet the applicable cost principles.

(5) Fee. A fee for work performed under phase-down activities will be negotiated by the parties prior to initiation of the activity.

(6) Proposed Schedule and Objectives for Phase-down.

(i) Within 120 days after the initial notification, NASA shall provide the Contractor with its proposed objectives for the phase-down process as well as a proposed schedule for phase-down. NASA will provide the Contractor with (1) a list of the task orders it intends to allow to continue during phase-down; (2) the proposed term of the phase-down; and (3) a proposed listing of the tasks that the Government expects to remain incomplete at the expiration of the phase-down period.

(ii) Within 120 days of receipt of NASA's proposal, the Contractor shall provide a proposal describing the activities required for phase-down and Contract close out and

associated cost estimates. Additionally, the Contractor shall immediately use its best efforts to mitigate cost expenditures for all tasks the Government does not intend to complete during the phase-down, including the exercise of termination provisions in subcontracts or the use of expedited close out procedures when requested by NASA. Using NASA's objectives and the Contractor's proposal, the parties shall enter into good faith negotiations to mutually agree upon an implementation plan for phase-down.

(iii) If the parties are unable to reach agreement upon one or more material aspects of an implementation plan within a reasonable period of time, the Contractor may seek to resolve the issues through the disputes process by submitting a claim or claims to the Contracting Officer pursuant to the Contract Disputes Act.

(iv) In accordance with specific direction of the Contracting Officer, the Contractor shall begin preparing an inventory of all items that are not deliverable or will not be consumed during the phase-down period of performance. All Government property on the inventory shall be reported to the NASA Property Officer for disposition instructions as soon as such property is no longer required for the performance of the Contract. Additionally, the Contractor shall promptly provide NASA with recommended disposition of all lease and other use agreements after a careful review of said leases and agreements. When requested by NASA, the Contractor shall attempt to renegotiate such lease or use agreements on non-NASA facilities to fit within the phase-down period of performance if a cost effective agreement can be reached. All contractor property on NASA facilities shall be subject to Government inspection and accounted for and removed per NASA approved procedures.

(d) Transfer to another Sponsor.

(1) Notice. At anytime during the term of the Contract, the Contracting Officer may notify the Contractor that NASA has elected to transfer the FFRDC to a new sponsor. Upon receipt of notification, the Contractor shall work with NASA and the successor sponsor to ensure an orderly transfer of the FFRDC. Any such transfer shall not be effective until the Government and the Contractor come to a bilateral agreement on the transfer.

(2) Transfer Period. The transfer period shall not exceed three months unless the parties mutually agree to an extension. If the transfer should coincide with the expiration of this Contract, the Contract term set forth in Section F shall be extended to coincide with the transfer period and any extensions thereof.

(3) Transfer Costs. It is expected that transfer of the FFRDC to a new sponsor during the term of the Contract should have no significant impact on the Contractor's substantive performance under each task order as they relate to the current Contract. Similarly, such a transfer is expected to have no significant impact on the day-to-day administration of the current Contract. Accordingly, the parties acknowledge that the transfer of the FFRDC to another sponsor should not result in any unique costs that must be specifically identified for reimbursement. However, in the event such a transfer takes place at the end of the Contract term, the parties acknowledge that the Contractor will be entitled to Contract close out costs in accordance with applicable cost principles set forth in Clause B-5 (Allowable Costs) of the Contract. In addition, if such a transfer occurs in connection with the termination of the Contract by the government, the parties acknowledge that other costs may be incurred that may be

considered for reimbursement by NASA in accordance with the aforementioned cost principles and the termination provisions of this Contract.

(i) Terms and Conditions. The terms and conditions in this Contract shall be applicable during any transfer period.

(ii) Fee. A fee for work performed under Contract transfer activities will be negotiated by the parties prior to initiation of the activity.

(e) Transition to Another Contractor.

(1) Notice. Prior to the expiration date of the Contract, the Contracting Officer may notify the Contractor that it has elected to transition the FFRDC to a new contractor at the expiration of the Contract. Upon receipt of notification, the Contractor shall work with NASA and the successor contractor to ensure an orderly transition of the FFRDC.

(2) Transition Period. Unless the transition occurs in connection with the termination of the contract, the transition period will commence at the end of the Contract term. The transition period shall not exceed three months unless the parties mutually agree to an extension. The Contract term set forth in Section F shall be extended to coincide with the transition period and any extensions thereof.

(3) Transition costs. The parties acknowledge that the transition of the FFRDC to a new contractor may result in additional costs related to transition activities, in addition to Contract close out costs. NASA will reimburse the Contractor for transition costs related to the orderly transition of the FFRDC to a successor contractor and Contract close out costs provided they are reasonable, allocable and allowable under the cost principles identified in Clause B-5 (Allowable Costs) of this Contract. In the event such a transition takes place in connection with the termination of the Contract by the government, the parties acknowledge that other costs may be incurred that may be eligible for reimbursement by NASA in accordance with the cost principles set forth in Clause B-5 (Allowable Costs) of the Contract.

(4) Terms and Conditions. The terms and conditions in this Contract shall be applicable during any transition period.

(5) Fee. A fee for work performed under Contract transition activities will be negotiated by the parties prior to initiation of the activity.

(6) Successor Contractor Rule. NASA will not reimburse the Contractor for lump sum severance payments made to its employees who are terminated by the Contractor and rehired by the successor contractor in the same or similar positions.

(f) Renewal of the Contract.

(1) Notice. Prior to the expiration date of the contract the Contracting Officer may notify the Contractor of the Government's intent to pursue the possibility of renewing the Contract for an additional term. A ten-month notification period is contemplated but not mandatory. Within ten days of receipt of this notice, the Contractor will provide its response. If

the Contractor agrees to pursue a renewal, the parties will engage in good faith negotiations to come to an agreement on the terms of renewal. If the Contractor declines the invitation, the Government will then exercise one or more of its options under subparagraphs (c), (d) or (e), above.

H-34 TRANSITION ACTIVITIES

(a) The Contractor recognizes that the work and services covered by this Contract are vital to the NASA mission and must be maintained without interruption, both at the commencement and the expiration of this Contract. It is therefore understood and further agreed in recognition:

(1) At the expiration of the Contract term or any earlier termination thereof, the Contractor shall cooperate with the successor organization and the Government by allowing its employees to interview for possible employment. If such employees accept employment with the successor organization, the Contractor shall release such employees at a time established by the successor organization or by the Government. The Contractor shall cooperate with the successor organization or the Government with regards to the termination or transfer arrangements for such employees to assure maximum protection of employee service credits and fringe benefits.

(2) After selection by the Government of any successor Contractor, the Contractor and such successor Contractor shall jointly prepare detailed plans for transitioning operations. Such plans shall specify a training and orientation program for the successor Contractor to cover each phase of the scope of work covered by the contract. A proposed date by which the successor Contractor will assume responsibility for such work shall be established. The Contractor shall retain full responsibility for such work until assumption thereof by the successor Contractor. Execution of the proposed plan or any part thereof shall be accomplished in accordance with the Contracting Officer's direction and approval.

(3) This clause shall apply to subcontracts as approved by the Contracting Officer.

(4) The Contractor shall be reimbursed for all reasonable phase-in and phase-out costs (i.e., costs incurred within the agreed period after contract expiration that result from phase-in and phase-out operations).

(b) At the expiration of the Contract term or any earlier termination thereof, NASA will either substitute a successor contractor, which will assume the Contractor's performance obligations under the Monk Hill Treatment System Agreement, or itself assume the Contractor's performance obligations, thereby releasing the Contractor from any further performance obligations under the Monk Hill Treatment System Agreement. This clause shall apply to any other agreements the Contractor has entered into pursuant to Clause H-8(b) to ensure the Contractor's performance obligations under these agreements are transitioned to the applicable successor Contractor or to the Government to the extent such Agreements so permit. **(Modification No. 19)**

H-35 TRANSITION FROM CONTRACT NAS7-1407

(a) This Contract is a successor Contract intended to provide an orderly transition from Contract NAS7-1407 to this contract. These provisions are set forth below.

(1) All task orders issued under Contract NAS7-1407 with statements of work where the technical performance has not been completed as of September 30, 2003, shall on and after October 1, 2003 be transferred to task orders issued under Contract NAS7-03001 on and after October 1, 2003. All available funds (with the exception of negative expenditures) which, as of September 30, 2003, remain allotted to such task orders and which are uncosted, as shown by the books and records of the Contractor's JPL operating division and verified by the Government, shall on and after September 30, 2003 be deobligated from NAS7-1407 and obligated to NAS7-03001. All task orders issued under Contract NAS7-1407 with statements of work that have been completed shall remain under NAS7-1407.

(b) The Contractor agrees to take the following steps in performing the transition between Contract NAS7-1407 and Contract NAS7-03001:

(1) Analyze NASA task orders to identify tasks where the period of performance has been completed.

(2) Associate all tasks where period of performance has been completed under Contract NAS7-1407 with LOC draws from Contract NAS7-1407 LOC.

(3) For task orders whose programmatic period of performance has not been completed:

(i) Continue numbering scheme for task orders established from the IFMP implementation (example NMO410687 –1407: NMO710687: Contract NAS7-03001).

(ii) Review task orders and update only those task plans that it is mutually agreed do not reflect the current scope of work.

(iii) Consistent with the Contractor's standard accounting practices, accrue normal operating costs for work performed but not recorded through September 30, 2003 under Contract NAS7-1407.

(iv) Reverse the accrual against Contract NAS7-1407 upon receipt and payment of individual vendor invoices and draw from Contract NAS7-1407 LOC on a first-in-first-out (FIFO) basis at the procurement instrument level from the Contract NAS7-1407 LOC until the FY03 accrual amount is equaled. Thereafter, draw all labor and material disbursements from a new LOC established by the Government for this contract (the "Contract NAS7-03001 LOC").

(vi) Charge actual labor and material transactions, plus allocated direct costs processed subsequent to September 30, 2003 to Contract NAS7-03001.

(vii) Draw all disbursements (i.e. labor, material and allocated direct costs), not including accrual amount as reflected in (b) (3) (iv) above, subsequent to September 30, 2003 from the "Contract NAS7-03001 LOC".

(c) All allowable costs, liabilities, and commitments, including but not limited to those attributable to accrued vacation and unemployment compensation, which have been transitioned to, incurred, accrued or made by the Contractor under Contract NAS7-1407 as of September 30, 2003, but which have not by that date been shown as an expenditure on the books and records of the JPL operating division, shall thereafter be deemed, for all purposes including but not limited to record retention purposes, to be allowable costs, liabilities or commitments incurred, accrued or made under Contract NAS7-03001; and subsequent payments to the Contractor by the Government arising out of such costs, liabilities and commitments shall be deemed to have been made under Contract NAS7-03001 and shall not be included in the calculation or definition of final payment under Contract NAS7-1407 nor be subject to the "completion invoice" (or "completion voucher"), assignment, release, or other final payment-related requirements of Section I, Clause 24, (Allowable Cost and Payment), of Contract NAS7-1407.

(d) All Government property which is in the possession of the Contractor as of September 30, 2003, for the performance of Contract NAS7-1407 shall remain in the possession of the Contractor for the performance of Contract NAS7-03001, subject to subsequent use or disposition thereof in accordance with the applicable provisions of Contract NAS7-03001.

H-36 STOP-WORK ORDER

The language in Clause F-3, FAR 52.242.15, Stop-Work Order (Alternative I) in paragraph (b) that refers to "any other terms of the contract" specifically includes task orders issued under this Contract.

H-37 SECURITY

(a) In establishing JPL procedures and practices in the areas of security, export control and the hiring, hosting or visits of foreign nationals, the Contractor shall comply with all applicable Federal laws and regulations including the most current NASA security policy and procedure issuances described below, and current issuances of the National Industrial Security Program Operating Manual (NISPOM), dated January 1995, and the NISPOM supplement (as it pertains to work performed under a DD Form 254). In any instance where the NISPOM and applicable NASA guidance are in disagreement, and then only as it applies to classified national security information, NASA will resolve such disagreements with the Defense Security Service (DSS) and the Contracting Officer shall inform the Contractor of such resolution in writing. The Contractor shall comply with such guidance.

(1) NPD 1600.2A, NASA Security Policy, dated April 20, 1998

(2) NPG 1620.1B, NASA Security Procedures and Guidelines, dated September 13, 2002: The NPG is incorporated into the Contract with the understanding that the responsibilities

defined within apply to the positions of those JPL individuals performing the specified functions. In addition, the following conditions and understandings will apply as set forth below:

(i) Chapter 1 (including 1.4.5.1) is incorporated into the Contract with the following understandings:

(A) The Director of the Jet Propulsion Laboratory, has responsibility for the security of JPL for those matters delineated in the NPG, except as specified below:

- 1.4.6.b (only as it pertains to the appointment of the NMO Chief of Security);
- 1.4.6.d (the Director of JPL is the Risk Acceptance Authority (RAA) with coordination with the NMO);
- 1.4.6.e (only for access to NASA classified information or other classified information entrusted to NASA); and
- 1.4.8.d

(ii) Chapter 2 is not incorporated into the Contract. Compliance is regulated by the NISPOM that is incorporated by FAR 52.204-2.

(iii) Chapter 3 is not incorporated into the Contract as this Chapter applies primarily to Civil Service employees. However, JPL will comply with the investigative and adjudicative requirements of subparagraphs 3.2.1, 3.2.2, 3.2.3, 3.2.4 (excluding 3.2.4.1), and Attachment D, with the understanding that NASA will provide JPL with a general exception to NRP access requirements under provision 1.2 of NPG 1620. The exception will mitigate NAC processing delays by allowing some interim unescorted access to NRP facilities while the NAC is in process. This exception per NASA letter dated January 7, 2003 will remain in effect commensurate with the principle of risk management. The intent of the parties is to update this letter prior to the effective date of this Contract.

(iv) Chapters 4 and 5 are not applicable because compliance is regulated by NISPOM.

(v) Chapter 6 is incorporated into the contract with the following understandings:

MODIFICATION No. 45

This modification definitizes contract modification 39 dated January 29, 2007.

1. clause H-37, SECURITY, paragraph (a)(2)(v)(A) is revised as follows:

“(v) Chapter 6 is incorporated into the contract with the following understandings:

(A) Through Contract Modification 32, the Parties incorporated FAR Clause 52.204-9, “Personal Identity Verification of Contractor Personnel”. Through contract Modification 39, the

Government incorporated the Personal Identity Verification Issuance Procedures referenced in Procurement Procedures PIC 06-01. Notwithstanding Modification 39, the Parties further hereby agree:

- (i) PIC 06-01 is considered to be issued as operational guidance.
- (ii) The Contractor shall, within 30 days from the effective date of this modification, submit to the Contracting Officer for review:
 - (a) an implementation plan detailing how the PIC, PIV credentialing and NASA badge issuance will be implemented by the Contractor. The plan shall be updated when major changes to the plan have occurred.
 - (b) an updated cost proposal for implementing the PIC, PIV credentialing and NASA badge by the Contractor. The cost proposal shall be consistent with Contractor defined responsibilities and Agency procedures.
- (iii) The Government will provide as Government Furnished Property or Services:
 - (a) four (4) operational badge issuing systems (including software) by May 15, 2007, and
 - (b) printed PIV-II credentials on an on-going basis commencing May 22, 2007, and
 - (c) Access to Office of Personnel Management Electronic Questionnaires for Investigations Processing (e-QIP) system for background investigation commencing April 11, 2007, and
 - (d) suitability determinations and adjudication as may be required under Homeland Security Presidential Directive-12, Office of Management and Budget M-05-24, or Federal Information Processing Standards Publication Number 201).
- (iv) The Contractor shall charge the associated costs to an appropriate burden account.
- (v) The written procedure identified in paragraph (a) above shall be consistent with NASA procedures and detail the Contractor defined roles, responsibilities, and process for issuing PIV Credentials and NASA badges for the Contractor's employees, subcontractor personnel, and affiliates. The Contractor shall perform the roles and responsibilities which are not inherently governmental (e.g., Sponsor; Enrollment Officer; Issuer). Further, the Contractor shall update its written procedure as may be necessary to remain consistent with Agency procedures. The Contractor shall submit the updated written procedures to the Contracting Officer for review.
- (vi) The Contractor shall, following the review by the Contracting Officer, implement its written procedures on an ongoing basis; provided, however, the Contractor shall implement its written procedures to ensure PIV Credentials and NASA badges are issued for current employees, subcontractor personnel, and affiliates by October 27, 2007. “

End of Modification No. 45

(B) 6.2 is not applicable as JPL does not issue Special Agent badges nor credentials.

(C) 6.10 is not applicable to the Contractor. In the event either party determines that there is a need for TSCM, NASA will provide such services.

(D) 6.11.3.2b shall not be construed to prohibit the Contractor from having stricter standards.

(vi) Chapter 7 is incorporated into the Contract with the following conditions and understandings:

(A) 7.3 The provision set forth in this chapter shall be incorporated into the activities required by Chapter 4 of NPR 7120.5D. These requirements are intended to ensure that necessary security specific requirements (e.g., physical, personnel, technical, communications, and information) are adequately considered and, when appropriate, incorporated into the overall program/project development and management. **(Modification 51)**

(B) 7.4 is incorporated into the Contract with the same understandings set forth in Chapter 3.

(C) 7.5 is not applicable because compliance is regulated by Chapter 5 of the NISPOM.

(D) 7.6 is not applicable.

(vii) Appendices A, B, and C are not incorporated into the Contract, compliance is regulated by NISPOM.

(3) NPD 2810.1, Security of Information Technology, dated October 1, 1998

(4) NPR 2810.1A, Security of Information Technology, dated May 16, 2006, subject to the following understandings and conditions (Modification 43):

(a) Documents referenced in NPR 2810.1A are not applicable unless expressly incorporated in the Contract. Documents not expressly incorporated into the Contract include but are not limited to all NASA Information Technology Requirements (NITRs) and Standard Operating Procedures (SOPs). The roles specified shall be accomplished by the Contractor's employees performing similar functions.

(b) Chapter 1, Introduction, Laws and Regulations, Capital Planning, and Metrics

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor shall accept the documents that exist on 2/1/2007, as indicated in Table 1 below as “Guidelines.” The Contractor will place particular emphasis on the documents showing asterisks before the Text in Table 1.

(ii) NASA and The Contractor will establish periodic meetings to discuss:

- (A) IT security requirements and processes
- (B) Metrics reporting
- (C) System boundaries (chapter 7)
- (D) Interconnection documentation tailoring (chapter 9)

(iii) The Contractor does not accept Section 1.4, Capital Planning.

(iv) The Contractor does not accept the Metrics in Section 1.5.2, but agrees to discuss Metrics in the periodic meetings.

Table 1

JPL’s Use	NPR 2810.1A NIST SP or FIPS Reference
Guidelines	* FIPS 199 Standards for Security Categorization of Federal Information and Information Systems
Guidelines	FIPS 140-2 Security Requirements for Cryptographic Modules
Guidelines	FIPS 46.3 Data Encryption Standard
Guidelines	FIPS 201 Personal Identity Verification (PIV) of Federal Employees and Contractors
Guidelines	SP 800-12, An Introduction to Computer Security: The NIST Handbook
Guidelines	SP 800-14 Generally Accepted Principles and Practices for Securing Information Technology Systems
Guidelines	SP 800-16 IT Security Training Requirements: A Role- and Performance-Based Model
Guidelines	* SP 800-18 Guide for Developing Security Plans for IT Systems
Guidelines	SP 800-19, Mobile Agent Security
Guidelines	SP 800-26 Security Self-Assessment Guide for Information Technology Systems
Guidelines	SP 800-27 Engineering Principles for IT Security
Guidelines	SP 800-28 Guidelines on Active Content and Mobile Code
Guidelines	* SP 800-30, Risk Management Guide for Information Technology System
Guidelines	SP 800-31 Intrusion Detection Systems
Guidelines	* SP 800-34 Contingency Planning Guide for Information Technology Systems
Guidelines	SP 800-35 Guide to IT Security Services
Guidelines	SP 800-36 Guide to Selecting Information Technology Security Products
Guidelines	* SP 800-37 Guide for the Security Certification and Accreditation of Federal Information Systems.
Guidelines	SP 800-41 Guides on Firewalls and Firewall Policy
Guidelines	SP 800-42 Guideline on Network Security Testing
Guidelines	SP 800-44 Guidelines on Securing Public Web Servers
Guidelines	SP 800-45 Guidelines on Electronic Mail Security
Guidelines	SP 800-46 Telecommuting and Broadband Communications
Guidelines	SP 800-47 Security Guide for Interconnecting Information Technology Systems
Guidelines	SP 800-48 Wireless Network Security 802.11, Bluetooth and Handheld Devices

Guidelines	SP 800-50 Building an Information Technology Security Awareness and Training Program
Guidelines	*SP 800-53 Recommended Security Controls for Federal Information Systems
Guidelines	SP 800-55 Security Metrics Guide for IT Systems
Guidelines	* SP 800-60 Volume I and II, Guide for Mapping Types of Information and Information to Security Categories
Guidelines	SP 800-61 Computer Security Incident Handling Guide
Guidelines	* SP 800-64 Considerations in the Information System Development Life Cycle
Guidelines	SP 800-65 Integrating Security into the Capital Planning and Investment Control Program
Guidelines	SP 800-77 Guide to IP Sec VPNs

Table 1 Applicable NIST and FIPS Documents Accepted As “Guidelines”

(c) Chapter 2, Roles and Responsibilities

(1) This Chapter is not accepted.

(d) Chapter 3, IT Program and System Security Assessments

(1) This Chapter is accepted with the understanding that this applies to NASA assessments of its Centers. The Contractor shall cooperate with and support NASA’s assessment of the Contractor.

(e) Chapter 4, Contracts, Grants, and Agreements

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor shall continue the current practice of including the Contractor’s IT Security requirements in subcontracts.

(ii) Section 4.2.2 is accepted in all subcontracts involving work specified in Article I-7, paragraph (a).

(f) Chapter 5, System Development Life Cycle

(1) This Chapter is accepted with the following understandings and conditions:

(i) Information Technology Security will be incorporated into the Contractor’s Information Systems Development Life Cycle (SDLC).

(g) Chapter 6, Information and Information System IT Security Strategy

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor shall follow as a guideline the security planning template provided by NIST SP 800-18, and will not separately document the information and information system strategy.

(h) Chapter 7, System Characterization, Information Categorization, System Types, and System Boundaries

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor shall continue to use its existing approach for defining system boundaries for the Contractor's systems that are not part of a larger NASA system. Sections 7.3.2 and 7.3.3 are accepted with the understanding that the references to Master and Subordinate systems apply only to a Contractor system that is part of a larger NASA system.

(ii) The Contractor does not accept section 7.5.2.1 as it pertains to rules for defining system boundaries, but shall continue to use its established criteria for defining such system boundaries.

(h) Chapter 8, Master and Subordinate IT Systems

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor shall exempt all Contractor systems that are not part of a larger NASA system from subordination to NASA Master IT systems. The only system at JPL for which this chapter applies at this time is the Common Badging and Access Control System (CBACS). Periodic meetings between NASA and JPL may address any potential future systems that may need to be added through the NASA-JPL Prime Contract Modification process.

(i) Chapter 9, System Interconnectivity

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor will require Interconnection Security Agreements for selected systems, based upon cost/benefit/risk analysis.

(ii) Where required, the Contractor will insert the necessary IT Security considerations into new or existing interface agreements.

(j) Chapter 10, Products and Services

(1) This Chapter is accepted with the understanding that it applies to IT security services or products.

(i) The Contractor shall establish and maintain policies, requirements, and procedures to ensure that IT security requirements are incorporated into subcontracts and agreements as appropriate

(k) Chapter 11, Security Controls

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor will incorporate controls based on NIST 800-53 guidelines. The Contractor will not be required to follow the remainder of Chapter 11 except that it may be followed as guidelines only.

(l) Chapter 12, IT Security Risk Management

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor shall follow the risk management approach based on NIST SP 800-30 guidelines. The Contractor will not be required to follow the remainder of Chapter 12 except that it may be followed as guidelines only.

(m) Chapter 13, IT System Security Planning

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor shall implement an IT System Security process based on the guidelines provided in the following documents:

- (A) The security planning template defined in NIST SP 800-18, Appendix A, augmented by
- (B) SP 800-30 (“Risk Management Guide for Information Technology Systems”)
- (C) SP 800-34 (“Contingency Planning Guide for Information Technology Systems”)

(ii) The Contractor will not be required to follow the remainder of Chapter 13 except that it may be followed as guidelines only.

(n) Chapter 14, System Certification and Accreditation

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor will follow the Certification and Accreditation process based on guidelines provided in NIST SP 800-37

- (A) Low Contractor systems will be certified by the responsible JPL Line Manager or designee
- (B) Moderate and High Contractor systems will be certified by an independent group managed by the Contractor’s Office of the Chief Information Officer (OCIO).

(ii) Moderate and High NASA systems will be certified using the tools and processes provided by NASA.

(iii) The Contractor will conduct a self-assessment of security controls for all IT systems.

(iv) The Contractor does not accept "Figure 14-1 Authorizing Officials" as it pertains to roles and responsibilities. These Authorizing Official functions will be performed by the Contractor's senior managers at the Division Manager level or higher.

(o) Chapter 15, System Contingency Planning

(1) This Chapter is accepted with the exception of paragraph 15.3.1.d. The contingency planning and coordinating roles specified shall be performed by Contractor personnel performing similar functions.

(p) Chapter 16, Network and System Monitoring

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor will conduct routine continuous monitoring at multiple locations limited to ensuring availability of networks and services and to detect and protect the network against hostile intrusions, misuse, and other threats.

(ii) The Contractor will support targeted monitoring, if requested by the Caltech Office of General Counsel or the Contractor's Office of Protective Services.

(iii) The Contractor will test and assess controls annually as to the degree accepted in chapters 3 and 12.

(iv) The Contractor will continue to follow an internal process that parallels ITS-SOP-21, "Network Security Vulnerability Scanning," dated October 5, 2005.

(v) The Contractor will activate its Network Configuration Control Board (NCCB) and identify the Contractor's point of contact for network control process and requirements discussions with NASA.

(q) Chapter 17, Security Incident Handling and Reporting

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor will continue to follow an internal process that parallels ITS-SOP-0015, "Procedures for Agency IT Security Incident Classification and Reporting," dated October 5, 2005.

(r) Chapter 18, IT Security Awareness and Training

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor shall ensure that its employees receive annual IT security awareness training consistent with NIST guidelines. The Contractor may use web-based training to meet this requirement.

(ii) The Contractor will augment existing role-specific security training to address new roles.

(s) Chapter 19, Account Management

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor shall use NAMS only for access to NASA applications and will use NAMS for provisioning and de-provisioning NASA applications managed by the Contractor for agency-level use.

(ii) The Contractor will develop and follow the Contractor's HSPD-12 implementation plan in lieu of NASA's HSPD-12 plan.

(t) Chapter 20, Logical Access

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor will incorporate logical access controls based on NIST SP 800-53 guidelines. The Contractor will not be required to follow the remainder of Chapter 20 except that it may be followed as guidelines only.

(u) Chapter 21, Audit Trails and Accountability

(1) This Chapter is accepted with the following understandings and conditions:

(i) The Contractor will implement audit and accountability based on NIST SP 800-53 guidelines. The Contractor will not be required to follow the remainder of Chapter 21 except that it may be followed as guidelines only.

(A)The Contractor will protect audit trail information against improper access, in accordance with the Contractor's requirement for protecting such information.

3. Article H-37, SECURITY, paragraph (a) (4) (i) is deleted in its entirety.

The Contractor (JPL) and the Government (NASA) have not yet agreed upon proposed cost(s) and it will be negotiated at a later date. **(Modification No. 43.)**

Modification 15, Effective Date 9/28/05:

1. In accordance with NASA Prime Contract NAS7-03001 Clause G-14, entitled "NASA Issuance System and Government Policies", NASA Procedural Requirement 1371.2A, entitled, "Procedural Requirements for Processing Requests for Access to NASA Installations or

Facilities by Foreign Nationals or US Citizens Who Are Reps of Foreign Entities,” adopted on April 07, 2003 and changed March 29, 2004, is hereby incorporated into the contract.

2. As a result of this modification, Clause H-37 entitled, “Security” is hereby changed to delete paragraphs H-37 (b), (c), (d), (e), (f) and (g) and is replaced with the following paragraph:

(5) NPR 1371.2A - Access to NASA Installations or Facilities by Foreign Nationals or US Citizens Who are Reps of Foreign Entities, dated April 7, 2003, with administrative changes dated March 29, 2004 with the following understandings:

(i) This NPR is incorporated into the Contract with the understanding that for the purposes of NASA abiding by NPD 1371.5 the security including those of the Center’s international visit coordinator, public affairs office and or export administration roles and responsibilities identified as performed by government personnel are to be performed by the JPL employees.

(ii) Paragraph 1.2.1 of the issuance is accepted with the understanding that the limitations on information that can be provided to foreign nationals described therein, do not apply to JPL foreign national employees who require such information in order to perform their work on a NASA program or project, including proposals.

(iii) Paragraph 1.3.1, of the issuance is accepted with the understanding that JPL is not expected to impose technical data restrictions on permanent residents in the approval process under NPR 1371.2A, except as may be required by applicable Federal laws or regulations.

(iv) Paragraph 2.2 of the issuance is accepted with the understanding that the last sentence thereof applies only to non-program/non-project visits (e.g. media visits).

(v) Paragraph 2.6 of the issuance is accepted with the understanding that the term “NASA contractors” includes not only JPL/Caltech employees, but also JPL/Caltech subcontractors.

3. The Contractor shall provide reports required by the NPR in accordance with contract clause C-1(e) General Reports. The Contractor will furnish in whatever format required by NASA such managerial, financial, technical, progress and other reports as the Contracting Officer determines to be necessary to reflect adequately the activities on under this Contract and will make such external distribution thereof as the Contracting Officer directs.

4. Section J entitled “List of Attachments,” Clause J-1, “List of Documents, Exhibits and Attachments (ARC52.211-90 (FEB 1997) Attachment “C”, entitled “Bibliography of NASA and Other Issuances Contractually Implemented” is hereby modified to include NPR 1371.2A.

(Paragraphs (b), (c), (d), (e), (f) and (g) were deleted by Modification 15.)

(h) The Contractor shall comply with these provisions for all JPL personnel and visitors:

(1) It is required that all persons engaged in work or visitors to JPL be registered and badged by JPL Security.

(2) All visitors will show an identification card with a picture when signing in at the Visitor Center.

(3) All Foreign National workers or visitors must have their visa or green card with them to gain access to JPL. They will be badged and wear their badge at all times while on the property. When an escort is required, the escort will be a U.S. citizen and stay with the foreign national at all times while on JPL and sign the person in & out.

(4) All issued badges shall be worn in such a manner as to be clearly visible on the upper part of the outer garment.

Unilateral Modification No. 39

Effective January 29, 2007

Homeland Security Presidential Directive (HSPD) 12, and FAR Clause 52.204-9, Personal Identity Verification of Contractor Personnel

Authority: Contract Clause G-14 (d) NASA Issuance Systems and Government Policies, and FAR Clause 52.243-2, Changes – Cost Reimbursement Alternative IV/V.

In conjunction with Homeland Security Presidential Directive (HSPD) 12, and FAR Clause 52.204-9, Personal Identity Verification of Contractor Personnel, the Contractor is directed to comply with the attached Personal Identity Verification (PIV) Card Issuance Procedures referenced under NASA Procurement Information Circular 06-01, dated January 18, 2006.

PIV Card Issuance Procedures in accordance with FAR clause 52.204-9, Personal Identity Verification of Contractor Personnel

FIPS 201 Appendix A graphically displays the following procedure for the issuance of a PIV credential.

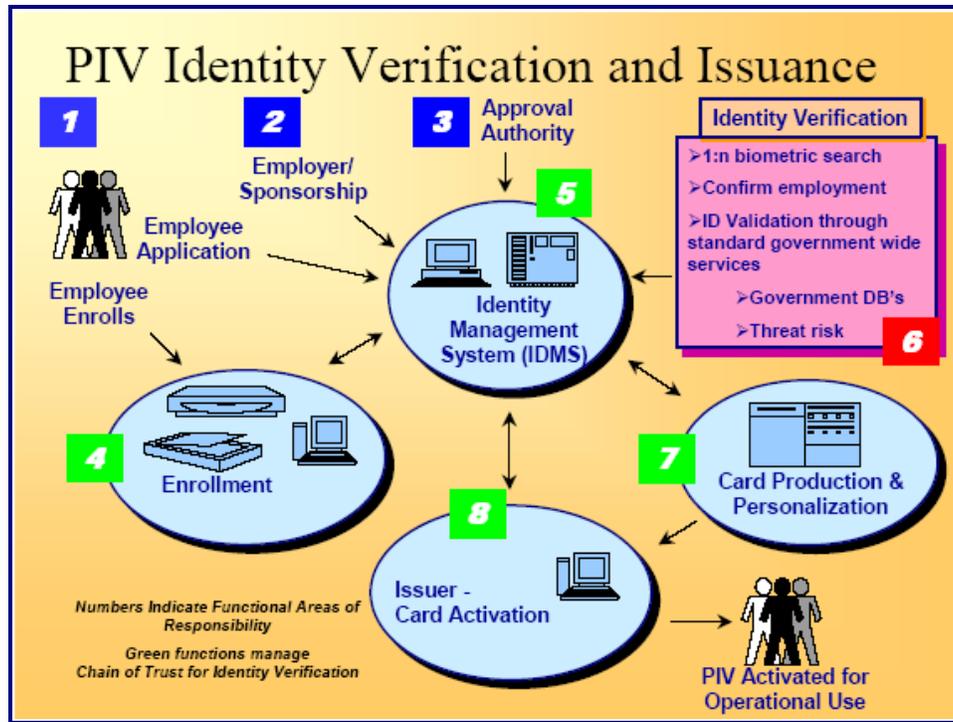


Figure A-1, FIPS 201, Appendix A

The following steps describe the procedures for the NASA Personal Identity Verification Card Issuance (PCI) of a PIV credential:

Step 1:

The Contractor's Corporate Security Officer (CSO), Program Manager (PM), or Facility Security Officer (FSO) submits a formal letter that provides a list of contract employees (applicant) names requesting access to the NASA Contracting Officer's Technical Representative (COTR). In the case of a foreign national applicant, approval through the NASA Foreign National Management System (NFNMS) must be obtained for the visit or assignment before any processing for a PIV credential can take place. Further, if the foreign national is not under a contract where a COTR has been officially designated, the foreign national will provide the information directly to their visit/assignment host, and the host sponsor will fulfill the duties of the COTR mentioned herein. In each case, the letter shall provide notification of the contract or foreign national employee's (hereafter the "applicant") full name (first, middle and last), social security number (SSN) or NASA Foreign National Management System Visitor Number if the foreign national does not have a SSN, and date of birth. If the contract employee has a current satisfactorily completed National Agency Check with Inquiries (NACI) or an equivalent or higher degree of background investigation, the letter shall indicate the type of investigation, the agency completing the investigation, and date the investigation was completed. Also, the letter must specify the risk/sensitivity level associated with the position in which each applicant will be working (NPR 1600.1, §4.5 is germane) Further, the letter shall also acknowledge that contract employees may be denied access to NASA information or information systems based on an unsatisfactory background investigation/adjudication. .

After reviewing the letter for completeness and concurring with the risk/sensitivity levels, the COTR/host must forward the letter to the Center Chief of Security (CCS). The CCS shall review

the OPM databases (e.g., DCII, PIP, et al.), and take appropriate steps to validate the applicant's investigation status. Requirements for a NACI or other investigation shall be initiated only if necessary.

Applicants who do not currently possess the required level of background investigation shall be directed to the e-QIP web site to complete the necessary background investigation forms online. The CCS shall provide to the COTR/host information and instructions on how to access the e-QIP for each contract or foreign national employee requiring access

Step 2:

Upon acceptance of the letter/background information, the applicant will be advised that in order to complete the investigative process, he or she must appear in-person before the authorized PIV registrar and submit two forms of identity source documents in original form. The identity source documents must come from the list of acceptable documents included in Form I-9, Employment Eligibility Verification, one which must be a Federal¹ or State issued picture identification. Fingerprints will be taken at this time. The applicant must appear **no later than** the entry on duty date.

When the applicant appears, the registrar will electronically scan the submitted documents; any document that appears invalid will be rejected by the registrar. The registrar will capture electronically both a facial image and fingerprints of the applicant. The information submitted by the applicant will be used to create or update the applicant identity record in the Identity Management System (IDMS).

Step 3:

Upon the applicant's completion of the investigative document, the CCS reviews the information, and resolves discrepancies with the applicant as necessary. When the applicant has appeared in person and completed fingerprints, the package is electronically submitted to initiate the NACI. The CCS includes a request for feedback on the NAC portion of the NACI at the time the request is submitted.

Step 4:

Prior to authorizing physical access of a contractor employee to a federally-controlled facility or access to a Federal information system, the CCS will ensure that a check has been performed with the National Crime Information Center (NCIC) and Interstate Identification Index. In the case of a foreign national, a national check of the Bureau of Immigration and Customs Enforcement (BICE) database will be performed for each applicant. If this process yields negative information, the CCS will immediately notify the COTR/host of the determination regarding access made by the CCS.

Step 5:

Upon receipt of the completed NAC, the CCS will update IDMS from the NAC portion of the NACI and indicate the result of the suitability determination. If an unsatisfactory suitability determination is rendered, the COTR will advise the contractor that the employee is being denied physical access to all federally-controlled facilities and Federal information systems.

¹ A non-PIV government identification badge, including the NASA Photo Identification Badge, MAY NOT BE USED for the original issuance of a PIV vetted credential

Based on a favorable NAC and NCIC/III or BICE check, the CCS will authorize the issuance of a PIV federal credential in the Physical Access Control System (PACS) database. The CCS, based on information provided by the COTR/host, will determine what physical access the applicant should be granted once the PIV issues the credential.

Step 6:

Using the information provided by the applicant during his or her in-person appearance, the PIV card production facility creates and instantiates the approved PIV card for the applicant with an activation date commensurate with the applicant's start date.

Step 7:

The applicant proceeds to the credential issuance facility to begin processing for receipt of his/her federal credential.

The applicant provides to the credential issuing operator proof of identity with documentation that meets the requirements of FIPS 201 (DHS Employment Eligibility Verification (Form I-9) documents. These documents **must** be the same documents submitted for registration.

The credential issuing operator will verify that the facial image, and optionally reference finger print, matches the enrollment data used to produce the card. Upon verification of identity, the operator will locate the employee's record in the PACS database, and modify the record to indicate the PIV card has been issued. The applicant will select a PIN for use with his or her new PIV card. Although root data is inaccessible to the operator, certain fields (hair color, eye color, et al.) may be modified to more accurately record the employee's information.

The applicant proceeds to a kiosk or other workstation to complete activation of the PIV card using the initial PIN entered at card issuance. (**Modification No. 39**)

H-38 AGREEMENT ON COMPUTER PROGRAMS

(a) The parties agree that the Contractor shall own all copyrights in computer programs, including derivative works, developed under this Contract. Therefore, the Contractor is granted permission to assert copyrights in computer programs developed under this Contract. For the purposes of this Contract, the term “computer program” is defined as computer code as may be implemented in software and/or programmable devices. Notwithstanding said Contractor rights, including the right to license such copyrights, the U.S. Government shall retain a nonexclusive, irrevocable, nontransferable, royalty-free, worldwide license under said copyrights for use by or on behalf of the U.S. Government, and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States.

(b) On the licensing or assignment by the Contractor of copyrights on computer programs developed under this Contract, the parties agree to share equally in any royalties received from said licensing and in any monies received from said assignment. Any payments to inventors and/or authors of software programs shall be calculated and paid prior to division of the remaining royalties between the parties. The Contractor shall provide the Government its 50 percent share of the gross royalties or monies received by the Contractor, after any payment to inventors and/or authors of software programs, from said licensing or assignment as an offset to allowable costs incurred under this Contract. These funds shall be provided and applied on a quarterly basis specifically as an offset to allowable costs incurred under this Contract in the performance of software technology development, and transfer and commercialization activities at JPL. In addition, the Contractor may elect to provide, in the same manner and for the same purpose, additional royalties or monies received by the Contractor from the licensing or assignment of copyrights on software and other intellectual property developed under this Contract. The Contractor shall offset its associated costs, including attorneys fees and administrative fees, from its 50 percent share of royalties or monies received from said licensing or assignment of copyrights on computer programs developed under this Contract. **(Modification No. 59)**

(c) The parties agree that any inventions which are conceived or reduced to practice in the performance of this Contract and which include a computer program (and/or concepts, processes, methods or algorithms that may be manifested in a computer program) developed under this Contract as a part of the invention will be treated differently than other inventions made in the performance of this Contract. Said inventions including a computer program may be elected by either party, in the manner specified in Clause FAR 52.227-11, Patent Rights Retention By The Contractor (Short Form) (Alternative IV) (Jun 1997) as Modified by NASA Far Supplement 1852.227-11 of this Contract with the Contractor having the first right to elect to retain title as specified in (c)(2) of FAR 52.227-11. If the Contractor elects to file a patent application on an invention including a computer program developed under this Contract, any royalties or monies derived from the licensing of said invention or patent application or patent based thereon shall be allocated as set forth in paragraph (b) above. In such cases, and consistent with paragraph (b) above, the Contractor shall utilize its share of royalties or monies from the licensing of an invention including a computer program, or a patent application or a patent based thereon to offset associated costs, including payments to inventors and/or authors of computer programs, attorney fees, and administrative expenses.

(d) The Contractor shall also provide a quarterly report to the Contracting Officer on the licensing of intellectual property rights on computer programs developed under this Contract. For such computer programs, this report shall include actual licensing and/or assignment of intellectual property rights; the receipt and distribution of gross royalties or monies received by the Contractor during the reporting period; and a listing of active licenses or assignments and the royalty amounts attributed to specific licenses or assignments during the reporting period and the year to date.

(e) In the licensing and distribution of computer programs developed under the Contract, the Contractor agrees to comply with all applicable laws and regulations concerning the export of commodities and technical data.

H-39 AGREEMENT ON ESTABLISHMENT OF RIGHTS, TECHNOLOGY TRANSFER, AND DISTRIBUTION OF INCOME WITH RESPECT TO MASK WORKS

The parties have agreed to the following arrangement in the belief that certainty with respect to the grant of statutory rights in Mask Works will enhance the transfer to third parties of semiconductor chip product technology.

(a) Within six (6) months after written disclosure of a Mask Work has been made to Contractor personnel responsible for implementation of Clause H-14 (Patent and New Technology Services), the Contractor shall furnish the Contracting Officer a full and complete technical report thereon, together with notice of whether or not Contractor elects to apply for registration, or publication with appropriate notice, of any Mask Work to which Contractor elects to retain title. In such instances Contractor will file an application to register Mask Works in a timely manner, but no later than six months after said notification. In the event it fails to do so, the rights otherwise provided to Contractor herein shall revert to the Government, with the reservation of a royalty free, nonexclusive license to Contractor for research and educational purposes.

(b) In the event Contractor receives royalty or other monetary consideration from the grant of Mask Work rights to a third party, after deduction of 25 percent which includes distribution according to Contractor's established royalty sharing plan, costs associated with registration and licensing, and other administrative costs, the remaining 75 percent shall be shared equally with the Government.

(c) The Contractor shall report such shared income quarterly to the Government specifying the licensed mask works, the licenses, and the income attributed to specific licenses. In the licenses and distribution of Mask Works developed under the Contract, the Contractor shall include statements regarding any export restrictions that may apply, and shall comply with all applicable U. S. export laws and regulations.

(d) This clause constitutes the permission required to claim copyright under Clause G-13 (References to FAR "Rights in Data" Clause).

H-40 PAYMENT OF OVERTIME PREMIUMS

For purposes of administering FAR 52.222-2, Payment of Overtime Premiums, prelaunch activities and mission performance or delivery related events of an urgent nature shall be deemed to be activities covered by FAR 52.222-2 paragraph (a)(3). In order to aid in contract administration, the Contractor shall provide the Contracting Officer with a monthly report evidencing overtime hours performed, and shall respond promptly should any further information be requested by the Government in this regard.

H-41 REQUIRED SOURCES OF SUPPLIES AND SERVICES

The Contractor shall acquire radioisotopes, liquid hydrogen, propellants, and mercury per NFS 1808.002 (PN 89-82).

H-42 USE OF FACILITIES PLAN

(a) The Contractor shall prepare, maintain, and comply with a Use of Facilities Communications Plan. The terms of the Plan shall be subject to the approval of the Director of the NMO. The Plan shall set forth:

(1) notification requirements applicable to use of Government-owned and Government-leased facilities provided under Clause C-2 (Resources for Performance of the Contract) of this Contract for specified categories of activity associated with performance of this contract and

(2) approval requirements applicable to use of such facilities by third parties.

H-43 INFORMATION TECHNOLOGY

The Contractor shall provide an information technology environment that is responsive to the following requirements:

(a) NASA shall have the use of all software assets at JPL to the extent allowed by the individual license agreement entered into by the Contractor under this contract that have been paid for by NASA. This is not to be construed as requiring the Contractor to specifically negotiate provisions for such NASA use into software licensing agreements.

(b) The Information Management staffs of JPL shall be available for participation in NASA-wide information management efforts on matters of NASA-wide policies.

(c) The JPL web site shall be a separately identified element of the OneNASA Web Portal.

(d) All electronic and information technology (EIT) products, including new World Wide Web (Web) pages and Web pages that have been substantially modified (greater than 100 staff hours) and placed online after the start of the Contract intended for use by the Government or public, and resulting from work performed under this Contract, regardless of whether or not the product(s) is specified as a deliverable of a task order, shall comply with the requirements of Section 508 of the Rehabilitation Act 29 U.S.C. 794(d), as described by the Architectural and Transportation Barriers Compliance Board ("Access Board") at 36 CFR Part 1194. "EIT" is

defined by the Access Board at 36 CFR Part 1194.4. This requirement does not apply to electronic and information technology that is incidental to the Contract or procured/developed prior to the start of this Contract. This requirement does not apply to Web pages in existence at the beginning of the Contract (though the Contractor may choose to make such pages compliant), with the exception of the official JPL public web page, URL www.jpl.nasa.gov, including any JPL web pages directed linked from that page. The requirement does not apply to Web pages that are intended solely for the Contractor and its subcontractors (i.e. Web pages that are not intended for use either by Federal civil services staff or by the general public). The Contractor shall be responsive to the Government's requests to prepare plans for an report status on adherence to Section 508 requirements. The Contractor shall comply with Section 508 requirements unless granted a waiver in writing by the Contracting Officer. Requests for waivers must be submitted to the Contracting Officer in writing and include the specific reason(s), consistent with the exceptions and undue burden considerations permitted under Section 508, why a specific product can not be made accessible.

H-44 GRAPHIC MARKINGS ON PAYLOADS

The Contractor will implement NPD 8610.6E, Graphic Markings on Space Transportation Vehicles, U.S. Components of the International Space Station Component Systems, and Payloads, dated July 12, 2002, when using graphic markings on any payload.

H-45 LITIGATION MANAGEMENT PLAN

- (a) A litigation management plan is a statement describing in advance the Contractor's practices for managing legal costs for litigation matters for which it procures the services of retained counsel. The Contractor shall prepare a litigation management plan that assures that retained legal counsel provides efficient and effective conduct of JPL related litigation at a reasonable cost.
- (b) The Contractor shall submit its JPL litigation management plan to the Contracting Officer within 90 days after the effective date of this Contract. The Contractor shall annually review and update its litigation management plan and submit any changes to the Contracting Officer.
- (c) The Contractor is responsible for accounting for costs incurred in connection with procuring the services of retained litigation counsel and for maintaining records adequate to demonstrate that costs claimed have been incurred, are allocable to the Contract, and comply with the applicable cost principles. The Contractor shall maintain such records for a period of three years after final payment and provide the Government access to such records for purposes of auditing expenditures. The Contractor is responsible for ensuring that the rates for professional fees of retained litigation counsel are reasonable for the services provided.
- (d) The Contractor shall provide notice of JPL litigation to NASA pursuant to FAR 52.228-7(g)(1), Insurance -- Liability to Third Persons and shall state whether the Contractor has reached a decision to engage outside counsel and the identity of such counsel. In addition, the notice shall state whether the litigation involves class actions or environmental torts or any other issue that the Contractor reasonable believes is of particular interest to NASA or the government as a whole.

Further, the notice shall state whether the Contractor reasonably anticipates asserting a claim or defense materially adverse to that of the Government.

(e) For those legal matters charged as a direct cost pursuant to B-5(b) rather than B-5(c)(2) of this Contract, the Contractor, if requested in writing by the Contracting Officer, shall prepare a case assessment as well as a staffing and resource plan for any matter for which the Contractor has given notice to NASA pursuant to FAR 52.228-7(g)(1), Insurance -- Liability to Third Persons. The Contractor will ordinarily respond to a request for case assessment and/or staffing and resource plan within 30 days after responding to the complaint and will provide the following information:

(1) Case budget broken down by phases in the litigation including:

- (i) Initial case development;
- (ii) Pretrial pleadings and motions;
- (iii) Discovery;
- (iv) Trial preparation and trial; and
- (iv) Appeal.

(2) Case assessment including:

- (i) Comprehensive analysis of the case;
- (ii) Recommendations for resolution.

(3) The procedure for keeping the Contracting Officer informed about the matter as it proceeds through the adjudicator process and, if necessary, interacting with the Department of Justice.

(f) Nothing in H-45 is intended to abridge or constitute a waiver of any attorney-client privilege or attorney work product privilege and it is understood that in complying with H-45, the Contractor shall maintain any such privileges.

H-46 INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO THE CONTRACTOR'S MANAGEMENT SYSTEM

(a) For the purposes of this clause,

(1) The environmental, safety, and health system (ESHS) encompasses safety and health of employees, protection of environment, and the protection of the facility (plant) and products from damage, and includes pollution prevention, waste minimization, efficient energy management practices; and

(b) In performing work under this Contract, the Contractor shall perform work safely, in a manner that ensures adequate protection of the public, employees, the facility (plant) and product from damage, and the environment, and shall be accountable for the safe performance of work. The Contractor shall integrate environmental, safety and health requirements into JPL program missions and Center operations. Environment, safety, and health programs shall be operated as an integral and visible part of how the organization conducts both its mission and facility operational business, including the management of both routine and emergency operations. The Contractor shall exercise due care commensurate with the associated hazards of the work. The Contractor shall ensure that management of environment, safety and health functions and activities becomes an integral and visible part of the Contractor's work planning and execution processes. The Contractor shall, in the performance of work, ensure that:

(1) Line management is responsible for establishing, maintaining, and enforcing safe and healthful working conditions and procedures for all personnel. All personnel shall take every reasonable measure to ensure safe and healthful operations and conditions in accomplishing its work, including the protection of the public, the facility, the product, and the environment from injury, illness, or damage.

(2) Clear and unambiguous lines of authority and responsibility for ensuring appropriate environment, safety and health processes are established and maintained at all organizational levels.

(3) Employees possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.

(4) Resources are effectively allocated to address environment, safety and health, programmatic, and operational considerations. Protecting the public and the employees from injury or illness, the facility (plant) and product from damage and the environment is a priority whenever activities are planned and performed.

(5) The ESHS implements the NPR 8553.1B, "NASA Environmental Management System," dated September 22, 2009. The ESHS will be designed to integrate management of environmental practices, and ensure compliance with applicable laws, regulations, and policies. This NPR is accepted with the understanding that for Section 4.2 Competence, Training and Awareness, paragraphs 4.2.1(a) and 4.2.1(b), JPL-wide training will be made available to JPL employees who elect to take it, however, this will not be considered mandatory training. Documents referenced in NPR 8553.1B, unless expressly incorporated into the Contract, are applicable only as guidelines for the Contractor. The responsibilities defined within the NPR 8553.1B for the Center personnel, up to and including Center Director, are understood to apply to the positions of those Contractor employees performing the specified functions.

(Modification 69)

(6) Before work is performed, the associated hazards are evaluated and environment, safety and health standards and requirements are established which, if properly implemented, should provide adequate assurance that employees, the public, and the environment are protected from adverse consequences.

(7) Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.

(c) The Contractor shall manage and perform work in accordance with a documented site-wide integrated ESHS that fulfills all conditions in paragraph (b) of this clause at a minimum. Documentation of the ESHS shall describe how the Contractor will:

- (1) Define the scope of work;
- (2) Identify and analyze hazards associated with the work;
- (3) Develop and implement hazard controls;
- (4) Perform work within controls;
- (5) Provide feedback on adequacy of controls and continue to improve safety management; and;
- (6) Describe how the Contractor will measure system effectiveness.

(d) The Contractor shall submit to the Contracting Officer documentation of its ESHS for review and comment. The Contracting Officer will establish dates for submittal, review, and comment on the ESHS documentation. Guidance on the preparation, content, review, and approval of the ESHS will be provided by the Contracting Officer. The Contractor shall review and update its ESHS on an annual basis and submit documentation to the Contracting Officer for review.

(e) The Contractor shall maintain the integrity of its ESHS and ensure it is integrated with the Contractor's business processes for work planning, budgeting, authorization, execution, and change control.

(f) The Contractor shall comply with, and assist the Government in complying with, environment, safety and health requirements of all applicable laws and regulations, and applicable Government Policies. The Contractor shall cooperate with Federal and non-Federal agencies having jurisdiction over environment, safety and health matters under this Contract.

(g) The Contractor shall promptly evaluate and resolve any non-compliance with applicable environmental, safety, and health requirements of this contract, and the ESHS. If the Contractor fails to provide resolution or if, at any time, the Contractor's action or inaction causes substantial harm or an imminent danger to the environment or health and safety of employees or the public, the Contracting Officer may issue an order stopping work in whole or in part. Any stop work order issued by a Contracting Officer under this clause (or issued by the Contractor to a subcontractor in accordance with paragraph (i) of this clause) shall be without prejudice to any other legal or contractual rights of the Government. In the event that the Contracting Officer issues a stop work order, an order authorizing the resumption of the work may be issued at the discretion of the Contracting Officer. The Contractor shall not be entitled to an extension of time

or additional fee or damages by reason of, or in connection with, any work stoppage ordered in accordance with the warranted exercise of this paragraph of the clause.

(h) The Contractor is responsible for flowing down the environment, safety and health requirements applicable to this Contract to subcontracts at any tier to the extent necessary to ensure the Contractor's compliance with the requirements.

(i) The Contractor shall include a clause substantially the same as this clause in subcontracts involving hazardous work on site at a NASA-owned or-leased facility. Such subcontracts shall provide for the right to stop work under the conditions described in paragraph (g) of this clause. Depending on the complexity and hazards associated with the work, the Contractor may choose not to require the subcontractor to submit a ESHS for the Contractor's review and approval.

H-47 NASA AUTHORITY DURING EMERGENCIES

(a) The authority expressed by NASA in this clause does not in any way reduce or diminish the responsibility the Contractor otherwise has under the terms of this Contract with regard to emergency preparedness and for executing the Emergency Plan prepared pursuant to Clause H-7 (Safety and Health) of this Contract.

(b) The Contractor recognizes that NASA may, in the event of an emergency (e.g., specific environmental, health, safety hazard, or security threat), direct the Contractor to take necessary action to shutdown JPL in a timely, but safe and protective manner. Such direction will be coordinated through the NMO Director or designee and the Contractor's action taken consistent with the Emergency Plan prepared pursuant to Clause H-7 (Safety and Health) of this Contract.

(c) The Contractor further recognizes that NASA may, in the event of an emergency (e.g., specific environmental, health, safety hazard, or security threat), direct the Contractor to take necessary action to timely cooperate with local, State, or federal public safety or emergency response organizations. Such direction will be coordinated through the NMO Director or designee and the Contractor's action taken consistent with the Emergency Plan prepared pursuant to Clause H-7 (Safety and Health) of this Contract.

H-48 NASA OFFICE OF THE INSPECTOR GENERAL PROGRAMS

(a) It is NASA policy that all NASA contractors cooperate fully with the NASA Office of Inspector General (NASA OIG) and its designees. Particularly in view of JPL's status as a FFRDC, the Contractor agrees to cooperate fully with the NASA OIG during the conduct of its programs, including audits, investigations, inspections, assessments, reviews, or other activities relating to JPL conducted pursuant to the authority conferred upon the NASA Inspector General by the Inspector General Act of 1978, as amended.

(b) In fulfilling its obligations under section (a) of this clause, the Contractor shall establish and maintain procedures for cooperating with OIG audits, inspections and investigations and for supporting the OIG's investigations into unauthorized intrusions into NASA-owned or NASA-funded computer systems (including networks) operated by JPL. These procedures shall ensure the NASA OIG is timely informed of allegations that

provide a reasonable basis to suspect that a crime may have been committed. The Contractor shall submit these procedures to the OIG for review and comment within 30 days after the effective date of this Contract.

(c) Nothing in this Contract is intended to abridge or be in derogation of the Inspector General's authority under the Inspector General Act of 1978, as amended.

H-49 RESPONSE TO INFORMATION CORRECTION REQUESTS

As requested by the Government, the Contractor shall validate the accuracy of information that is the subject of a public request for correction pursuant to Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554), also known as the Data Quality Act. Pursuant to the requirements of the Act, the Contractor shall determine whether correction of the challenged information is warranted, and if so, the Contractor shall correct the information in accordance with existing statutes, regulations, and procedures. If the Contractor decides not to correct the information, the Contractor shall inform the Government of the reason for the decision. The Contractor shall be responsive to the Government's requests to prepare plans for and report status on adherence to Data Quality Act requirements.

H-50 COORDINATION WITH NASA ON NOTICES AND CORRECTIVE ACTIONS

(a) For purposes of this clause, the term "Notice" includes, but is not limited to Notice of Deficiency, Notice of Non-compliance, Notice of Violation, Notice of Alleged Violation, Notice of Regulatory Violation, Notice of General Violation, Notice of Serious Violation, or any other similar type communication from a federal, state, or local regulator that has jurisdiction over environmental, safety, and health matters relating to work performed under the Contract.

(b) Protection of workers, the public, and the environment are fundamental responsibilities of the Contractor. However, the Contractor recognizes JPL is a Government-owned facility and that NASA has certain responsibilities for the conduct of all programs funded through the Contract and for assuring that the Government funds are properly and effectively utilized. Therefore, the Contractor shall establish and maintain a procedure for keeping NASA informed of communications and interactions the Contractor might have with federal, state, or local regulators and for coordinating the Contractor's response with NASA prior to submitting its response to the regulators.

(c) Consistent with (b) of this clause, the Contractor shall verbally notify the Contracting Officer or designee within 48 hours of any Notice, as described in (a) of this clause, the Contractor may receive. The Contractor shall notify the Contracting Officer or designee in writing, along with submitting a copy of the Notice, not less than five (5) days after receipt of the Notice.

(d) Consistent with (b) of this clause, the Contractor shall coordinate the Contractor's proposed response to the Notice with NASA prior to submitting its response to the regulators. Coordination with NASA should be initiated early enough to ensure any time line set forth in the Notice or established by the cognizant regulator is timely met. Continuing coordination by the Contractor with NASA may, depending on the subject matter and circumstances surrounding the

Notice, be necessary. If warranted, NASA may provide additional guidance to the Contractor to facilitate the coordination process, especially if a corrective action or other similar response plan must be submitted by the Contractor to the cognizant regulator.

(e) The Contractor, if requested to do so by the Contracting Officer, shall provide assistance to the Government concerning any matter arising under or relating a Notice as described in (a) of this clause.

(f) When NASA or another NASA contractor receives a Notice with respect to a facility described in Clause C-2 (Resources for Performance of the Contract), NASA shall provide (or require its contractor to provide) the Contractor with a copy of the Notice.

H-51, AIRCRAFT OPERATIONS

(a) When leasing, chartering, or renting aircraft or aircraft services for research, program support or mission management, the following requirements apply to all of the Contractor's aircraft missions:

(1) 41 CFR 102-33, "Management of Government Aircraft". The requirements of 41 CFR 102-33.5 through 102-33.460 shall be met by providing the information necessary for NASA to conduct the required cost analysis, inventory control and safety reporting.

(2) NPR 7900.3B, "Aircraft Operations Management Manual", dated June 14, 2007, is accepted with the following understandings:

- (i) Chapter 2 is not applicable.
- (ii) Section 6.3.1.9 is accepted with the understanding that all safety and emergency response – related requirements are performed by NASA and the U.S. Army, Fort Irwin, at the Goldstone Deep Space Communications Complex airstrip.
- (iii) Section 6.4. is not applicable.
- (iv) Section 7.2.4 is accepted with the understanding that medical screening may be conducted by a non NASA MD for qualified Non-Crew members.
- (v) Chapter 8 is not applicable.
- (vi) Chapter 9 is not applicable.
- (vii) Section 10.5 is accepted to the extent that JPL will attend the IAOP semi annually. The remainder of Chapter 10 is not applicable.
- (viii) Chapter 12 is not applicable.
- (ix) Sections 13.3.1 – 13.3.1.3 are accepted with the understanding that all safety and emergency response – related requirements are performed by NASA and the U.S. Army, Ft. Irwin, at the Goldstone Deep Space Communications Complex airstrip.
(Modification No. 52)

- (2) NPD 7900.4B, "NASA Aircraft Operations Management", dated April 27, 2004.
- (3) 41 CFR 101-37.000, "Cross Reference to the Federal Management Regulation (FMR) (41 CFR Chapter 102, part 102-33 and the Federal Travel Regulation (FTR) (41 CFR Chapters 300-304, parts 300-3, 301-10 and 301-70)).", 41 CFR 300-3, "Glossary of Terms", 301-10.260 through 301-10.266, "Travel on Government Aircraft," 41 CFR 301-10.10.403, "What is the difference between a Government aircraft and an aircraft hired as a special conveyance?," 41 CFR 301-70.800, "Subpart I- Policies and Procedures for Agencies that Authorize Travel on Government Aircraft," And 41 CFR 301-70.900, "Subpart J-Policies and Procedures for Agencies that Own or Hire Government Aircraft for Travel."
- (4) Title 49 U. S. C. Sections 40102 (a) (41) and 40125, "Definition of Public Aircraft P.L. 106-181."
- (5) The Contractor will ensure that the Contractor's managers or researchers who negotiate aviation subcontracts coordinate those subcontracts with a NASA Center's aircraft management office to ensure compliance with the NASA aviation safety program and aircraft management policies.
 - (i) The Contractor will coordinate through the NASA Ames Research Center all aircraft airworthiness certification processes and flight readiness reviews for all Contractor's aircraft projects. Ames Research Center will handle all of the appropriate NASA HQ notifications in regards to Contractor aircraft usage regardless of when a NASA asset (aircraft) is utilized or when a Contractor contracted aircraft is utilized. Ames Research Center will handle all coordination with other centers as appropriate to obtain airworthiness certification and/or flight readiness reviews for the Contractor's activities.
 - (ii) The Contractor will be responsible to ensure that a sufficiently detailed risk analysis of the flight program/project is conducted and provided to Ames Research Center for review and approval for flight airworthiness that meets the NASA operational safety standards.
 - (iii) The Contractor will provide support as appropriate and as requested from Ames Research Center to ensure that proper and complete flight airworthiness approvals and that flight readiness reviews are conducted for all the Contractor's aircraft usage.
- (b) Purchase of aircraft or aircraft services shall require the approval of the Contracting Officer and the Assistant Administrator for Infrastructure and Administration, in accordance with NPR 7900.3B (**Modification No. 52**)
- (c) Documents referenced within those listed in this Article H-51 are not applicable unless expressly incorporated in the Contract. (**Modification No. 48**)

H-52 TRANSPORTATION EFFICIENCY

(a) Transportation Efficiency. The Contractor shall comply with the Federal fleet and transportation efficiency goals and requirements of Section 303 of the Energy Policy Act of 1992, P.L. 102-486, and of Executive Order 13149, Greening the Government Through Federal Fleet and Transportation Efficiency, dated April 21, 2000. The Contractor shall:

(1) Ensure that all Government-owned contractor-operated vehicles comply with all applicable goals and other requirements of Executive Order 13149 by adopting the NASA compliance strategy.

(2) Set annual goals to reduce vehicle petroleum usage from FY 1999 consumption levels. The annual goals shall be indexed to the Federal goals to reduce vehicle petroleum consumption by at least 20 percent by the end of FY 2005.

(3) Comply with the alternative fuel vehicle acquisition requirements established by section 303 of the Energy Policy Act of 1992 and use alternative fuels to meet the majority of the fuel requirements of those motor vehicles no later than the end of FY 2005.

(4) Provide annual reports on acquisition and use of Government-owned vehicles using the Federal Automotive Statistical Tool (FAST) web-based reporting tool, not later than October 15th of each calendar year.

**1852.223-76 FEDERAL AUTOMOTIVE STATISTICAL TOOL REPORTING
(JULY 2003)**

If authorized to operate Government-owned or –leased vehicles, including interagency fleet management system (IFMS) vehicles or related services in performance of this contract, the Contractor shall report the data describing vehicle usage required by the Federal Automotive Statistical Tool (FAST) by October 15 of each year. FAST is accessed through <http://fastweb.inel.gov/>.

(End of clause) (Modification 14)

(b) Transportation Reports. The Contractor shall provide all reports required by Federal, State, and local regulations, Executive Orders, or NASA Issuances listed in (b), within the timeframe established by the regulatory requirement, Executive Order or NASA.

H-53 RESERVED (Modification 77)

H-54 RESERVED (Modification 77)

H-55 REQUIREMENTS FOR COMPETITIVE SOURCING

(a) Competitive Sourcing is defined as a disciplined approach to exposing Contractor activities to an examination of whether the activity could be more effectively performed by an

outside organization versus the Contractor's own organization. The process of competition provides an imperative for the Contractor to focus on continuous improvement and removing roadblocks to better performance and greater efficiency. The objective is to focus on the most effective and efficient way of accomplishing the Contractor's mission regardless of whether it is done by JPL employees or outside subcontractors.

(b) The parties agree that the JPL Director has been granted total authority, without dollar limitation, by the Contractor to conduct competitive sourcing of base operations and non-scientific general operations. The JPL Director will conduct competitive sourcing of base operations, non-scientific general operations activities, and other activities eligible for consideration for competitive sourcing, on a periodic basis. A comprehensive summary of JPL's competitive sourcing plans covering all activities will be provided to NASA on or before April 30, 2003. The Contractor will provide annual updates to this submission to the extent specified by the Contracting Officer. Although the annual updates are intended to update and supplement the submission, any extension of this Contract beyond five years will require that a new comprehensive summary be provided. The comprehensive summary and the annual updates require top-level NASA Headquarters review and concurrence. Concurrence or non-concurrence will be based on the overall reasonableness of the plan, and will be completed within 60 days of receipt from the Contractor.

(c) The Contracting Officer has the right under this clause to provide specific guidance to the Contractor concerning the type and extent of information to be provided in support of the comprehensive summary and annual updates.

H-56 LIMITATION OF FUTURE CONTRACTING (NFS 1852.209-71) (DEC 1988)

(a) The Contracting Officer has determined that this acquisition may give rise to a potential organizational conflict of interest. Accordingly, the attention of the Contractor is invited to FAR Subpart 9.5-Organizational Conflicts of Interest.

(b) The nature of this conflict includes, but is not limited to:

(1) JPL provides advisory and assistance services in assisting NASA in the review, selection, award, and monitoring of Announcements of Opportunity, NASA Research Announcements, and other Broad Agency Announcements.

(2) JPL provides advisory and assistance services to NASA in program and project management roles (e.g., NASA program lead, NASA project lead), which includes program and project planning that may result in subsequent competitive acquisition of supplies and services.

(3) JPL provides advisory and assistance services in assisting NASA in other decision-making roles (e.g., export control; energy management; education/outreach; and NASA's SBIR program)

(4) JPL manages the Research and Technology Operating Plans (RTOPs) program and the Caltech streamlined subcontracting process for the award of observation time on

programs such as the Space Infrared Telescope (SIRTF). The Contractor may be tasked with similar roles for other programs in the future.

(5) JPL has access to technical and business information that should not be disclosed to outside interests.

(6) JPL has access to NASA internal technical and business information.

(7) JPL may hold financial interests in organizations that it conducts business with.

Due to the circumstances set forth above, the Contractor might be in a position to favor its own products or capabilities and/or may have an unfair competitive advantage.

(c) Based upon these roles performed by the Contractor, restrictions upon future contracting are set forth as follows:

(1) If the Contractor, under the terms of this contract, or through the performance of tasks pursuant to this contract, is required to develop complete specifications or statements of work that are to be incorporated into a Government solicitation for non-developmental items, the Contractor shall be ineligible to perform the work described in that solicitation as a prime or first-tier subcontractor under an ensuing NASA contract.

(2) To the extent that the work under this contract requires access to proprietary, business confidential, or financial data of other companies, and as long as these data remain proprietary or confidential, the Contractor shall protect these data from unauthorized use and disclosure and agrees not to use them to compete with other companies. Evaluation of proposal information will be governed by Clause H-12 (Evaluation of Proposals Received From NASA).

(3) The Contractor is required to have written Conflict of Interest procedures subject to approval and periodic audit by the Government. The written procedures shall address policies to eliminate or mitigate potential conflicts as set forth in paragraph (b) above and any other potential conflicts that may be identified by the Contracting Officer during performance of the Contract.

(4) For tasks that may result in subsequent competitive acquisition of developmental items (e.g., flight hardware), a written conflict of interest avoidance plan will be developed as part of the task plan for the work effort and will be approved by NASA prior to initiation of the task. Although NASA may identify potential conflicts to the Contractor prior to initiation of the task, it is incumbent upon the Contractor to review the work to be performed under the task to identify potential conflicts. Conflict of interest avoidance plans will contain the following elements:

(i) A description of the potential conflict of interest.

(ii) The management plan to avoid or mitigate the conflict of interest, including the organizational controls that will be put in place to ensure effective separation of organizational units that may be involved in planning and determining requirements from those organizations that may be involved in proposing for such work efforts.

(iii) The requirement that personnel who will be involved in planning and determining requirements for tasks where a potential conflict of interest exists will be required to sign a non-disclosure agreement attesting that they will not be involved in working on a proposal in response to any solicitation resulting from the task, and that they will not talk or provide information about the task to anyone who has not signed the non-disclosure agreement. The written non-disclosure agreements will be kept on file by the program or project manager and will be available for NASA's inspection.

(iv) The requirement that the program or project manager will maintain a comprehensive list of all persons with access to information about the task and each person's organizational affiliation. (Modification 62)

(v) The requirement that persons involved in planning and determining requirements for tasks will be required to answer questions and provide additional information related to a subsequent procurement actions only through the procedures set forth by the JPL contracting organization, allowing equal access to information by all potential offerors.

(vi) The names of persons in the organization, by specific job title, who will be responsible for ensuring that the conflict of interest avoidance plan is followed.

(vii) Signature of the plan by the responsible official.

(viii) Approval of the plan by the Contracting Officer prior to initiation of the task. For conflicts that are not identified until after initiation of the task, the potential conflict will be identified immediately to the Contracting Officer, who will determine the timeframe for approval of the plan and any restrictions for immediate implementation prior to the plans formal approval.

H-57 ADVANCED PAYMENTS

In applying I-13, Advance Payments (FAR 52.232-12), (Alternate II) (May 2001) (Alternate IV) (April 1984) (Alternate V) (May 2001) (Deviation), delivery of the Contractor's annual audited financial statements to the Contracting Officer shall be deemed to satisfy the requirements of paragraph (j)(1); and paragraphs (l) and (m) shall not be deemed to take effect (nor shall the specific amounts in paragraph (m) be determined) unless and until, with Contracting Officer approval, an advance payment is taken for estimated costs for future work to be performed under this contract and such paragraphs shall remain in effect only until that advance payment has been fully utilized for contract performance or refunded.

H-58 LIABILITY FOR SUBCONTRACTOR'S DEFECTIVE COST OR PRICING DATA

Clause 52.215-10, Price Reduction For Defective Cost or Pricing Data (October 1997) is incorporated into the Contract with the understanding that while it may render the Contractor liable under the terms of the clause for the certifications of its subcontractors, the clause does not

require, by its terms, that the Contractor submit a Certificate of Current Cost or Pricing Data under this contract.

H-59 REQUIREMENT FOR INFORMATION TECHNOLOGY BUDGET PLAN

(a) On an annual basis, the contractor shall prepare an Information Technology (IT) Budget Plan for presentation to the NASA Chief Information Officer (CIO). The Budget Plan shall describe all expenditures for operation of and modifications to the JPL IT infrastructure, as well as initiatives for research, applied research, or engineering of new IT solutions related to the JPL IT infrastructure, proposed for the fiscal year. IT infrastructure is defined here to be the data and telecommunications networks, telecommunications systems, servers, services, application software systems, commercial off-the-shelf software, personnel, and all other IT resources that are shared across multiple JPL task orders.

(b) No funds shall be expended by JPL for initiatives described in the IT Budget Plan without the prior review of the Plan by the NASA CIO. Any content modifications to the IT Budget Plan must be reviewed by the NASA CIO prior to execution.

H-60 NASA RESEARCH AND DEVELOPMENT (R&D) ABSTRACTS

(a) The Contractor shall, within 60 days after the effective date of this Contract, enter a summary or abstract for the research and development to be conducted under this procurement into the NASA R&D Abstracts website at: <http://proposals.hq.nasa.gov/abstracts>.

(b) The parties agree to work cooperatively to determine the level of abstract reporting that will be required under this contract. Abstracts should be in the range of 250 to 500 words. The abstract will be made available to the public without restrictions; therefore, the Contractor is not required to include material they desire to keep out of the public domain. Specifically, the abstracts will be included in a database containing R&D abstracts from many other Government agencies. Abstracts will be merged with other information concerning the awards, such as the dollar value and estimated completion date. Other agencies and private organizations can search the database to determine whether research is being performed in a particular area, and who is performing it. This could lead to additional awards for related efforts.

H-61 MONTHLY PROPERTY FINANCIAL REPORTING

(a) The Contractor shall provide monthly property financial reports, electronically submitted, using the Contractor-Held-Asset Tracking System (CHATS) in the format described in the CHATS user's manual. Monthly property financial reports shall be submitted with item level supporting data. This data shall be submitted for all items with an acquisition cost of \$100,000 or more, in the Contractor's and subcontractors' possession, in the following classifications: real property, equipment, special test equipment, special tooling, and agency peculiar property. Monthly reporting is not required for property in the above classifications with an acquisition cost under \$100,000. Monthly data shall also be submitted for items of any acquisition cost in

the classifications of materials, construction in progress (CIP), and contract work-in-process (CWIP). Itemized monthly data is required for materials and WIP line items of \$100,000 and over. Summary monthly data is required for materials line items under \$100,000. For CIP and CWIP the total cost regardless of values will be reported.

(b) Acquisition costs should be developed using actual costs to the greatest extent possible, especially costs directly related to fabrication such as labor and materials. Supporting documentation shall be maintained and available for all amounts reported, including any amounts developed using estimating techniques.

(c) Adjustments shall be thoroughly explained and directly related to a specific fiscal year. If the fiscal year cannot be determined the default shall be the previous fiscal year.

(d) Contractor acquired property (CAP), CWIP, and any new materials acquired will be reported to the Task Order defined UPN structure and not a separate WBS structure.

(e) The Monthly reports are due the 21st day of the month following the calendar month to be reported.

(f) The Monthly reports required by this clause are separate from and in addition to the annual NF1018 reports required under G-1 of this Contract. **(Modification 8)**

H-62 AMERICAN RECOVERY AND REINVESTMENT ACT (“Recovery Act”)

(a) The following provisions are applicable only to any non-construction Task Order which specifically states that it is funded in whole or in part by the American Recovery and Reinvestment Act of 2009 (or Recovery Act), thereby invoking this Clause H-62:

- (1) FAR 52.203-15, Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (MAR 2009)
- (2) FAR 52.204-11, American Recovery and Reinvestment Act—Reporting Requirements (MAR 2009)
- (3) FAR 52.215-2, Audit and Records – Negotiation (MAR 2009); Alternate I (MAR 2009); Alternate I (JAN 1997) & Alternate II (APR 1998).

NOTE: For Recovery Act funded Task Orders the above version of FAR 52.215-2 and Alternate Provisions apply in lieu of the FAR 52.215-2 (JUN 1999) version reflected in Section I - CONTRACT CLAUSES, of the Contract.

(b) Recovery Act funded Task Orders for Construction – Reserved.

(Modification No. 64)

H-63 SYSTEMS ENGINEERING

NPR 7123.1A, "Systems Engineering Processes and Requirements," dated March 26, 2007, is incorporated into this Contract with the following understandings:

- (a) NPR 7123.1A applies to new Task Orders for the delivery of missions and projects issued after the Contractor's NPR 7123.1A Implementation Completion Date (ICD). The NPR 7123.1A also applies after the ICD to ongoing Task Orders for the delivery of missions and projects provided the missions/projects are prior to Key Decision Point C. The ICD shall be 12 months after the Government formally approves the required Contractor NPR 7123.1A Systems Engineering Implementation Plan (SEI Plan).
- (b) Deliverable requirements which are stated in the NPR 7123.1A as due "x months after the effective date of this NPR" shall be understood to mean they are due "x months after the execution date of this Modification."
- (c) Section 2.2.1.2 - "three months" is deleted and "six months" is substituted.
- (d) Section 3.1.2.4 – The term "NASA workforce" is understood to mean "NASA or the Contractor's workforce".
- (e) Chapter 4 – This is accepted with the understanding that the responsibilities defined within apply to the positions of those Contractor employees performing the specified functions or subcontractors performing such functions.
- (f) Sections 5.3.1.3, 5.3.1.5, 5.3.1.6, and 5.3.1.7 are acceptable subject to the text "in accordance with the review entry and success criteria defined in tables . . ." being understood to mean "as guided by the review entry and success criteria in tables . . ."
- (g) Sections 6.2.2 and 6.2.4 – JPL shall create the SEMP baseline prior to the Preliminary Design Review for AO-driven projects and missions and by the Mission Definition Review for all other projects and missions.
- (h) Appendix D, Sections D.1, D.3, and D.4.5.2 are acceptable with the understanding that the responsibilities defined within apply to the positions of those Contractor employees performing the specified functions.
- (i) Documents referenced in NPR 7123.1A are not applicable unless expressly incorporated into the Contract.

(Modification No. 65)**Article H-64, SOFTWARE ENGINEERING REQUIREMENTS**

NPR 7150.2A, "NASA Software Engineering Requirements," dated November 19, 2009 is incorporated with the following understandings:

- (a) NPR 7150.2A applies to software created or acquired as Class A, B, and C as defined in Appendix E, Software Classifications. It applies to Class D software to be used in space, to support ground or to support space operations. NPR 7150.2A also applies to software created or acquired for use by other NASA Centers or other NASA organizations regardless of the software classification. NPR 7150.2A is not applicable to software not included in the description above.
- (b) NPR 7150.2A applies to new Task Orders for the delivery of missions and projects issued on October 1, 2010 and after. The NPR 7150.2A also applies to ongoing Task Orders for the delivery of missions and projects provided the missions/projects are prior to Key Decision Point C and/or Preliminary Design Review on October 1, 2010.
- (c) Documents referenced in NPR 7150.2A, unless expressly incorporated into the Contract, are applicable only as guidelines for the Contractor.
- (d) The responsibilities defined within the NPR for the Center personnel, up to and including Center Director are understood to apply to the positions of those Contractor employees performing the specified functions.

(Modification 69)

[END OF SECTION]

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I-1 LISTING OF CLAUSES

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.

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.202-1	DEC 2001	DEFINITIONS
52.203-3	APR 1984	GRATUITIES
52.203-5	APR 1984	COVENANT AGAINST CONTINGENT FEES
52.203-6	JUL 1995	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT
52.203-7	JUL 1995	ANTI-KICKBACK PROCEDURES
52.203-8	JAN 1997	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-10	JAN 1997	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-12	JUN 1997	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
52.204-2	AUG 1996	SECURITY REQUIREMENTS (ALTERNATIVE 1) (APR 1984)
52.204-4	AUG 2000	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER
52.204-9	JAN 2006	PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (Modification No. 32)
52.208-8	APR 2002	REQUIRED SOURCES FOR HELIUM AND HELIUM USAGE DATA
52.209-6	JUL 1995	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT
52.211-15	SEP 1990	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS
52.215-2	JUN 1999	AUDITS AND RECORDS – NEGOTIATION (ALTERNATIVE I) (JAN 1997) & ALTERNATIVE II) (APR 1998)
52.215-8	OCT 1997	ORDER OF PRECEDENCE - UNIFORM

- CONTRACT FORMAT
- 52.215-9 OCT 1997 CHANGES OR ADDITIONS TO MAKE OR BUY PROGRAM
- 52.215-10 OCT 1997 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA
- 52.215-12 OCT 1997 SUBCONTRACTOR COST OR PRICING DATA
- 52.215-14 OCT 1997 INTEGRITY OF UNIT PRICES (ALTERNATIVE I) (OCT 1997)
- 52.215-19 OCT 1997 NOTIFICATION OF OWNERSHIP CHANGES
- 52.219-8 OCT 2000 UTILIZATION OF SMALL BUSINESS CONCERNS
- SMALL BUSINESS SUBCONTRACTING
- 52.219-9 APR 2008 PLAN (**Modification 69**)
- 52.219-16 JAN 1999 LIQUIDATED DAMAGES – SUBCONTRACTING PLAN
- 52.222-1 FEB 1997 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES
- 52.222-3 AUG 1996 CONVICT LABOR
- 52.222-4 SEP 2000 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT – OVERTIME COMPENSATION
- 52.222-20 DEC 1996 WALSH-HEALY PUBLIC CONTRACTS ACT
- 52.222-21 FEB 1999 PROHIBITION OF SEGREGATED FACILITIES
- 52.222-26 APR 2002 EQUAL OPPORTUNITY
- 52.222-29 FEB 1999 NOTIFICATION OF VISA DENIAL
- 52.222-35 DEC 2001 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
- 52.222-36 JUN 1998 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES
- 52.222-37 DEC 2001 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
- 52.223-6 MAY 2001 DRUG FREE WORKPLACE
- 52.223-9 AUG 2000 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED PRODUCTS is added with the following information to complete part (b)(2):
(b) The Contractor, on completion of this contract

- shall (1) estimate the percentage of the total recovered material used in contract performance, including, if applicable, the percentage of post-consumer material content and (2) submit this estimate to NMO Health, Safety and Environmental Manager AND NASA Headquarters Code JE (Mod 3)
- 52.223-10 AUG 2000 WASTE REDUCTION PROGRAM
- 52.223-11 MAY 2001 OZONE-DEPLETING SUBSTANCES
- 52.223-12 MAY 1995 REFRIGERATION EQUIPMENT AND AIR CONDITIONERS
- 52.223-14 OCT 2000 TOXIC CHEMICAL RELEASE REPORTING
- 52.224-1 APR 1984 PRIVACY ACT NOTIFICATION
- 52.224-2 APR 1984 PRIVACY ACT
- 52.225-1 MAY 2002 BUY AMERICAN ACT - SUPPLIES
- 52.225-8 FEB 2000 DUTY FREE ENTRY
- 52.225-11 JUL 2002 BUY AMERICAN ACT – CONSTRUCTION OF MATERIALS UNDER TRADE AGREEMENTS
- 52.225-12 MAY 2002 NOTICE OF BUY AMERICAN ACT REQUIREMENTS – CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS
- 52.225-13 JUL 2000 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES
- 52.226-1 JUN 2000 UTILIZATION OF INDIAN ORGANIZATION AND INDIAN-OWNED ECONOMIC ENTERPRISES
- 52.227-1 JUL 1995 AUTHORIZATION AND CONSENT (ALTERNATE I) (APR 1984)
- 52.227-2 AUG 1996 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
- 52.227-10 APR 1984 FILING OF PATENT APPLICATIONS – CLASSIFIED SUBJECT MATTER
- 52.227-11 JUN 1997 PATENT RIGHTS – RETENTION BY THE CONTRACTOR (SHORT FORM) (ALTERNATIVE IV) (JUN 1997) AS MODIFIED BY NASA FAR SUPPLEMENT 1852.227-11
- 52.227-14 JUN 1987 RIGHTS IN DATA – GENERAL (ALTERNATIVE II) (JUN 1987) (ALTERNATIVE III) (JUN 1987) (ALTERNATIVE V) (JUN 1987) AS MODIFIED BY NASA FAR SUPPLEMENT 1852.227-14
- 52.227-16 JUN 1987 ADDITIONAL DATA REQUIREMENTS
- 52.228-7 MAR 1996 LIABILITY TO THIRD PERSONS
- 52.230-2 APR 1998 COST ACCOUNTING STANDARDS
- 52.230-6 NOV 1999 ADMINISTRATION OF COST ACCOUNTING STANDARDS
- 52.232-9 APR 1984 LIMITATION OF WITHHOLDING OF PAYMENTS

52.232-17	JUN 1996	INTEREST
52.232-23	JAN 1986	ASSIGNMENT OF CLAIMS
52.232-33	MAY 1999	PAYMENT BY ELECTRONIC FUNDS TRANSFER – CENTRAL CONTRACTOR REGISTRATION
52.233-1	JUL 2002	DISPUTES (ALTERNATIVE I) (DECEMBER 1991)
52.233-3	AUG 1996	PROTEST AFTER AWARD (ALTERNATE I) (JUN 1985)
52.242-1	APR 1984	NOTICE OF INTENT TO DISALLOW COSTS
52.242-13	JUL 1995	BANKRUPTCY
52.243-2	AUG 1987	CHANGES – COST REIMBURSEMENT (ALTERNATIVES IV & V) (APR 1984)
52.244-5	DEC 1996	COMPETITION IN SUBCONTRACTING
52.244-6	MAY 2002	SUBCONTRACTS FOR COMMERCIAL ITEMS
52.245-5	JAN 1986	GOVERNMENT PROPERTY (COST-REIM- BURSEMENT, TIME-AND-MATERIAL, OR LABOR-HOUR CONTRACTS)
52.245-7	MAR 1996	GOVERNMENT PROPERTY (CONSOLIDATED FACILITIES)
52.245-8	JAN 1997	LIABILITY FOR THE FACILITIES
52.245-9	APR 1984	USE AND CHANGES
52.246-9	APR 1984	INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM)
52.246-10	APR 1984	INSPECTION OF FACILITIES
52.246-23	FEB 1997	LIMITATION OF LIABILITY
52.246-24	FEB 1997	LIMITATION OF LIABILITY – HIGH VALUE ITEMS (APPLICABLE TO PROPERTY OTHER THAN REAL PROPERTY)
52.247-1	APR 1984	COMMERCIAL BILL OF LADING NOTATIONS
52.247-27	APR 1984	CONTRACT NOT AFFECTED BY ORAL AGREEMENT
52.247-63	JAN 1997	PREFERENCE FOR U.S.-FLAG AIR CARRIERS
52.247-64	JUN 2000	PREFERENCE FOR PRIVATELY OWNED U.S.- FLAG COMMERCIAL VESSELS (ALTERNATIVE I) (APR 1984)
52.251-1	APR 1984	GOVERNMENT SUPPLY SOURCES [PARAGRAPHS (A) AND (B) OF THIS CLAUSE REFER TO FAR CLAUSE 52.245-5]
52.251-2	JAN 1991	INTERAGENCY FLEET MANAGEMENT SYSTEM VEHICLES AND RELATED SERVICES
52.253-1	JAN 1991	COMPUTER GENERATED FORMS

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.203-70	JUN 2001	DISPLAY OF INSPECTOR GENERAL HOTLINE POSTERS
1852.216-89	JUL 1997	ASSIGNMENT AND RELEASE FORMS
1852.219-74	SEP 1990	USE OF RURAL AREA SMALL BUSINESSES
1852.219-75	MAY 1999	SMALL BUSINESS SUBCONTRACTING REPORTING
1852.219-76	JUL 1997	NASA 8 PERCENT GOAL
1852.219-77	MAY 1999	NASA MENTOR PROTÉGÉ PROGRAM
1852.219-79	MAR 1999	MENTOR REQUIREMENTS AND EVALUATION
1852.223-74	MAR 1996	DRUG- AND ALCOHOL-FREE WORKPLACE
1852.223-76	JULY 2003	FEDERAL AUTOMOTIVE STATISTICAL TOOL REPORTING (Mod 14) (See H-52 (a) (4) for full text)
1852.227-87	APR 1989	TRANSFER OF TECHNICAL DATA UNDER SPACE STATION INTERNATIONAL AGREEMENTS
1852.228-75	OCT 1988	MINIMUM INSURANCE COVERAGE
1852.235-70	JUL 2000	CENTER FOR AEROSPACE INFORMATION--FINAL SCIENTIFIC AND TECHNICAL REPORTS, (AS IMPLEMENTED THROUGH C-1(e)(8) OF THIS CONTRACT)
1852.237-70	DEC 1988	EMERGENCY EVACUATION PROCEDURES
1852.242-75	MAR 1999	EARNED VALUE MANAGEMENT SYSTEM
1852.242-76	MAR 1999	MODIFIED COST PERFORMANCE REPORT
1852.242-78	APR 2001	EMERGENCY MEDICAL SERVICES AND EVACUATION
1852.243-71	MAR 1997	SHARED SAVINGS

(End Of Clause)

I-2 INCORPORATION IN FULL TEXT

The following clauses are incorporated in full text because they require insertion of supplementary information or are deviations.

I-3 CLAUSES INCORPORATED BY REFERENCE (FAR 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 these addresses:

<http://www.arnet.gov/far/>

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

(End of Clause)

I-4 OMBUDSMAN (NFS 1852.215-84) (JUN 2000) (ALTERNATE I) (JUN 2000)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the Contracting Officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the Contracting Officer for resolution.

(b) If resolution cannot be made by the Contracting Officer, interested parties may contact the installation ombudsman:

Director, NASA Management Office at JPL
4800 Oak Grove Drive
Pasadena, CA 91109
Mail Stop 180-801
Telephone Number: (818)-354-5359
Facsimile Number: (818)-393-2607

Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the NASA ombudsman, the Assistant Administrator for Procurement, at 202-358-2090, and facsimile 202-358-3082. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

(c) If this is a task or delivery order contract, the ombudsman shall review complaints from contractors and ensure they are afforded a fair opportunity to be considered, consistent with the procedures of the contract.

(End of Clause)

I-5 SUBCONTRACTS (FAR 52.244-2) (AUG 1998) (ALTERNATIVE I) (AUG 1998) (DEVIATION)

(a) Definitions. As used in this clause

"Approved purchasing system," means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

"Consent to subcontract," means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

"Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) This clause does not apply to subcontracts for special test equipment when the contract contains the clause at FAR 52.245-18, Special Test Equipment.

(c) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (d) or (e) or this clause.

(d) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that--

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds-

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For contracts awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(e) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts: Any subcontract or class of subcontracts identified by the Contracting Officer in writing as selected for special surveillance.

(f) (1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c), (d), or (e) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) If the Contractor has an approved purchasing system and consent is not required under paragraph (c), (d), or (e) of this clause, the Contractor nevertheless shall notify the Contracting Officer reasonably in advance of entering into any (i) cost-plus-fixed-fee subcontract in excess of \$1,000,000, or (ii) fixed-price subcontract that exceeds the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (f)(1)(i) through (f)(1)(iv) of this clause.

(3) In addition, the Contracting Officer may require special surveillance of any acquisition or class of acquisitions forecast under this contract. This special surveillance may include advance notification (by Caltech) of key acquisition milestones, briefings to appropriate government personnel on salient features of the acquisition, and the requirement for Government consent on the resulting subcontract.

(g) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination -

- (1) Of the acceptability of any subcontract terms or conditions;
- (2) Of the allowability of any cost under this contract; or
- (3) To relieve the Contractor of any responsibility for performing this contract.

(h) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(i) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(j) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(k) Paragraphs (d) and (f) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

(l) Consistent with the requirements of this contract, the Contractor shall establish procurement policies and procedures and conform to good business practice for the guidance of its personnel concerned with the negotiation, administration and termination of subcontracts. Serious consideration shall be given to adapting and including therein those policies and procedures established by FAR and NFS, which the Contractor deems susceptible to adaptation on a practical basis, compatible with the Contractor's policies and potentially beneficial. Further, the Contractor shall give special consideration to any NASA procurement policy or procedure, which the Contracting Officer brings to the Contractor's attention. Contractor's General Provisions, Additional General Provisions and Standard Alterations which are based on Prime Contract flowdown requirements shall be subject to the approval of the Contracting Officer prior to implementation. Copies of all General Provisions and Additional General Provisions which are not based on Prime Contract flowdown requirements, procurement related policies, and procedures shall be provided to the Contracting Officer at the time of final publication.

(m) The Contractor shall include language in subcontracts that allows for the assignment, novation, or transfer of the subcontract to a successor in interest, a successor contractor, or the Government, in the event of (1) a phasedown of the FFRDC; (2) transfer of the FFRDC to another sponsor; (3) a termination of the contract; or (4) transition of the contract.

(End of Clause)

I-6 SECURITY CLASSIFICATION REQUIREMENTS (NFS 1852.204-75) (SEP 1989)

Performance under this contract will involve access to and/or generation of classified information, work in a security area, or both, up to the level of TOP SECRET. See Federal Acquisition Regulation clause 52.204-2 in this contract and DD Form 254, Contract Security Classification Specification, Attachment F.

(End of Clause)

I-7 SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (NFS 1852.204-76) (JUL 2002) (DEVIATION)

(a) The Contractor shall be responsible for Information Technology security for all systems connected to a NASA network or operated by the Contractor for NASA, regardless of location. This clause is applicable to all or any part of the contract that includes information technology resources or services in which the Contractor must have physical or electronic access to NASA's sensitive information contained in unclassified systems that directly support the mission of the Agency. This includes information technology, hardware, software, and the management, operation, maintenance, programming, and system administration of computer systems, networks, and telecommunications systems. Examples of tasks that require security provisions include:

- (1) Computer control of spacecraft, satellites, or aircraft or their payloads;
- (2) Acquisition, transmission or analysis of data owned by NASA with significant replacement cost should the contractor's copy be corrupted; and
- (3) Access to NASA networks or computers at a level beyond that granted the general public, e.g. bypassing a firewall.

In Article I-7, SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (NFS 1852.204-76) (JUL 2002) (DEVIATION) delete paragraphs (b), (c) and (e) in their entirety and substitute as follows:

- (b) The Contractor timely submitted its required IT Security Plan on October 13, 2003.
- (c) Reserved. **(Modification No. 43)**

(d)(1) Contractor personnel requiring privileged access or limited privileged access to systems operated by the Contractor for NASA or interconnected to a NASA network shall be screened at an appropriate level in accordance with NPG 1620.1B, Chapter 3; and paragraph (d)(2) of this clause. Those Contractor personnel with non-privileged access do not require personnel screening. NASA shall provide screening using standard personnel screening National Agency Check (NAC) forms listed in paragraph (d)(3) of this clause, unless contractor screening in accordance with paragraph (d)(4) is approved. The Contractor shall submit the required forms to

the NASA Center Chief of Security (CCS) within fourteen (14) days after contract award or assignment of an individual to a position requiring screening. The forms may be obtained from the CCS. At the option of the government, interim access may be granted pending completion of the NAC.

(2) Guidance for selecting the appropriate level of screening is based on the risk of adverse impact to NASA missions. NASA defines three levels of risk for which screening is required (IT-1 has the highest level of risk):

(i) IT-1 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause very serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of spacecraft, satellites or aircraft.

(ii) IT-2 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of payloads on spacecraft, satellites or aircraft; and those that contain the primary copy of "level 1" data whose cost to replace exceeds one million dollars.

(iii) IT-3 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause significant adverse impact to NASA missions. These systems include, for example, those that interconnect with a NASA network in a way that exceeds access by the general public, such as bypassing firewalls; and systems operated by the contractor for NASA whose function or data has substantial cost to replace, even if these systems are not interconnected with a NASA network.

(3) Screening for individuals shall employ forms appropriate for the level of risk as follows:

(i) IT-1: Fingerprint Card (FC) 258 and Standard Form (SF) 85P, Questionnaire for Public Trust Positions;

(ii) IT-2: FC 258 and SF 85, Questionnaire for Non-Sensitive Positions; and

(iii) IT-3: NASA Form 531, Name Check, and FC 258.

(4) The Contracting Officer may allow the Contractor to conduct its own screening of individuals requiring privileged access or limited privileged access provided the Contractor can demonstrate that the procedures used by the Contractor are equivalent to NASA's personnel screening procedures. As used here, equivalent includes a check for criminal history, as would be conducted by NASA, and completion of a questionnaire covering the same information as would be required by NASA.

(5) Screening of contractor personnel may be waived by the Contracting Officer for those individuals who have proof of --

(i) Current or recent national security clearances (within last three years);

(ii) Screening conducted by NASA within last three years; or

(iii) Screening conducted by the Contractor, within last three years, that is equivalent to the NASA personnel screening procedures as approved by the Contracting Officer under paragraph (d)(4) of this clause.

(e) Reserved. **(Modification No. 43)**

(f) The Contractor shall afford NASA access to the Contractor's and subcontractors' facilities, installations, operations, documentation, databases and personnel used in performance of the contract. Access shall be provided to the extent required to carry out a program of IT inspection, investigation and audit to safeguard against threats and hazards to the integrity, availability and confidentiality of NASA data or to the function of computer systems operated on behalf of NASA, and to preserve evidence of computer crime.

(g) The Contractor shall incorporate the substance of this clause in all subcontracts that meet the conditions in paragraph (a) of this clause.

(End of clause)

I-8 PAYMENT FOR OVERTIME PREMIUMS (FAR 52.222-2) (JUL 1990)

(a) The use of overtime is authorized under this contract if the overtime premium does not exceed \$0 or the overtime premium is paid for work --

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall --

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

(End of Clause)

**I-9 NOTICE OF RADIOACTIVE MATERIALS (FAR 52.223-7) (JAN 1997)
(DEVIATION)**

(a) The Contractor shall notify the Contracting Officer or designee, in writing, 30 days prior to the delivery of, or prior to completion of any servicing required by this contract of, items containing either

(1) radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in Title 10 of the Code of Federal Regulations, in effect on the date of this contract, or

(2) other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries. Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the Contractor which will put users of the items on notice as to the hazards involved (OMB No. 9000-0107).

(b) If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this contract or prior contracts, the Contractor may request that the Contracting Officer or designee waive the notice requirement in paragraph (a) of this clause. Any such request shall --

(1) Be submitted in writing;

(2) State that the quantity of activity, characteristics, and composition of the radioactive material have not changed; and

(3) Cite the contract number on which the prior notification was submitted and the contracting office to which it was submitted.

(c) All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to

the Government shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the contract.

(d) This clause, including this paragraph (d), shall be inserted in all subcontracts for radioactive materials meeting the criteria in paragraph (a) of this clause.

(End of Clause)

I-10 ALLOWABLE COST AND PAYMENT (FAR 52.216-7) (FEB 2002) (DEVIATION)

(a) Invoicing. The Government shall make payments to the Contractor as work progresses, by means of withdrawals by the Contractor from a Letter of Credit, as described in Clause B-6 of this Contract, (Contractor Financing by Letter of Credit). Such payments shall be in amounts determined to be allowable by the Contracting Officer in accordance with this clause, with B-5 of this contract and with other terms and conditions of this contract. Within fifteen (15) working days after the close of the Contractor's fiscal month the Contractor will submit to the Contracting Officer, a public voucher (i.e. no pay voucher) supported by a statement (using the same major categories of cost reported on in the NF533 reports) of the costs/expenditures made by the Contractor in the performance of this contract during the prior fiscal month and claimed to constitute allowable costs.

(b) Reimbursing costs.

(1) For the purpose of reimbursing allowable costs (except as provided in paragraph (b)(2) of this clause, with respect to pension, deferred profit sharing, and employee stock ownership plan contributions), the term "costs" includes only-

(i) Those recorded costs that, at the time of the request for reimbursement, the Contractor has paid by cash, check, or other form of actual payment for items or services purchased directly for the contract;

(ii) When the Contractor is not delinquent in paying costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for-

(A) Supplies and services purchased directly for the contract and associated financing payments to subcontractors, provided payments will be made-

(1) In accordance with the terms and conditions of a subcontract or invoice; and

(2) Ordinarily prior to the submission of the Contractor's next payment request to the Government;

(B) Materials issued from the Contractor's inventory and placed in the production process for use on the contract;

(C) Direct labor;

(D) Direct travel;

(E) Other direct in-house costs; and

(F) Properly allocable and allowable institutional indirect costs, as shown in the records maintained by the Contractor for purposes of obtaining reimbursement under Government contracts; and

(iii) The amount of financing payments that have been paid by cash, check, or other forms of payment to subcontractors.

(2) Accrued costs of Contractor contributions under employee pension plans shall be excluded until actually paid unless-

(i) The Contractor's practice is to make contributions to the retirement fund quarterly or more frequently; and

(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractor's indirect costs for payment purposes).

(3) Any statements in specifications or other documents incorporated in this contract by reference designating performance of services or furnishing of materials at the Contractor's expense or at no cost to the Government shall be disregarded for purposes of cost-reimbursement under this clause.

(c) Small business concerns. A small business concern may receive more frequent payments than every 2 weeks.

(d) Allocated direct costs.

(1) For contract monitoring, budgeting and managerial purposes of NASA, the Contractor shall submit to the Contracting Officer allocated direct cost (planning) rates and the bases to which they apply no later than October 30 for each fiscal year during the term of this contract.

(2) The Contractor shall, within 90 days after the expiration of each fiscal year, or by a later date approved by the Contracting Officer, submit to the cognizant Contracting Officer and, to the cognizant audit activity (DCAA), final allocated direct costs, final allocated direct cost rates and the base(s) to which the costs have been allocated in sufficient detail to allow audit.

(3) Allowability of the allocated direct costs will be determined in accordance with B-5 of this contract. The Contractor shall promptly respond to any questions concerning allowability and the method(s) used in the collection, control, distribution and accounting of allocated direct costs to the cost objectives of the period, and work with the Contracting Officer to resolve any outstanding issues.

(4) The Contractor and the Contracting Officer shall execute a written understanding setting forth any required changes in the Contractor's methods for the collection, control, distribution and accounting of allocated direct costs. Adjustments to the final allocated direct costs or its distribution to the cost objective of the period in question shall be accomplished if those amounts would have had a material effect upon the costs of the period. Any adjustments shall be accomplished by the Contractor in the current period, consistent with NASA's accounting requirements.

(5) Questions concerning the allowability of any final allocated direct costs which cannot be resolved by the Contracting Officer and the Contractor shall be deemed to be a dispute within the meaning of the Disputes clause.

(e) Quick-closeout procedures. Quick-closeout procedures are applicable when the conditions in FAR 42.708(a) are satisfied.

(f) Audit. At any time or times before final payment, the Contracting Officer may have the Contractor's invoices or vouchers and statements of cost audited. Any payment may be-

(1) Reduced by amounts found by the Contracting Officer not to constitute allowable costs; or

(2) Adjusted for prior overpayments or underpayments.

(g) Final payment.

(1) The Contractor shall submit a completion invoice or voucher designated as such and a final SF272 to close the Letter of Credit, promptly upon closeout of all task orders under this contract. Upon approval of a completion invoice or voucher submitted by the Contractor in accordance with this clause, and upon the Contractor's compliance with all terms of this contract, the Government shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

(2) The Contractor shall pay to the Government any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Contractor or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Contractor has been reimbursed by the Government. Reasonable expenses incurred by the Contractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by the Contracting Officer. Before final payment under this contract, the Contractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver-

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except-

(A) Specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known;

(B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and

(C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractor's indemnification of the Government against patent liability.

(End of clause)

I-11 LIMITATION OF COSTS (FAR 52.232-20) (APR 1984); LIMITATION OF FUNDS (FAR 52.232-22) (APR 1984) (DEVIATION)

(a) The parties estimate that performance of this contract will not cost the Government more than (1) the estimated cost specified in the Schedule (See B-2) or, (2) if this is a cost-sharing contract, the Government's share of the estimated cost specified in the Schedule. The Contractor agrees to use its best efforts to perform the work specified in the Schedule and all obligations under this contract within the estimated cost, which, if this is a cost-sharing contract, includes both the Government's and the Contractor's share of the cost.

(b) Each task order specifies the amount presently available for payment by the Government and allotted to such task order, the items covered, the Government's share of the cost if this is a cost-sharing contract, and the period of performance it is estimated the allotted amount will cover. The parties contemplate that the Government will allot additional funds incrementally to task orders up to the full estimated cost to the Government specified in each task order, exclusive of any fee. The Contractor agrees to perform, or have performed, work on each task order up to the point at which, in the exercise of reasonable judgment by the Contractor, costs incurred by the Contractor in performing work in-house, plus obligations incurred by the Contractor in subcontracting, approximate the amount of funds then allotted, by the Government as specified in each task order.

It is recognized that the point to which the Contractor is required to continue performance does not include an allowance for termination costs which will be incurred in the event the task order is terminated. It is the intention of the Government to allot the additional funds necessary to provide for termination costs to such terminated task order subject to the limitations set forth in paragraph (k) herein and using procedures set forth in G-8, (Funds Procedures for Termination of Task Orders).

(c) The Contractor shall notify the Contracting Officer in writing at least fifteen (15) days prior to the date on which, in the reasonable judgment of the Contractor, costs incurred by the Contractor in performing work in-house, plus obligations incurred by the Contractor in subcontracting, will approximate the amount of funds then allotted, by the Government as specified in each task order. The notice shall state the estimated amount of additional funds required to continue performance under the task order to completion or for 3 months whichever is less.

(d) If, after notification, additional funds are not allotted by the end of the period specified in the notification or another agreed-upon date, upon the Contractor's written request the Contracting Officer will terminate the task order on that date in accordance with the provisions of the Termination clause of this contract. If the Contractor estimates that the funds available will allow it to continue to discharge its obligations beyond that date, it may specify a later date in its request, and the Contracting Officer may terminate this contract on that later date.

(e) Except as required by other provisions of this contract, specifically citing and stated to be an exception to this clause-

(1) The Government is not obligated to reimburse the Contractor for costs incurred in excess of the total amount allotted by the Government to the task order; and

(2) The Contractor is not obligated to continue performance of a task order or otherwise incur costs in excess of-

(i) The amount then allotted to each task order by the Government or;

(ii) If this is a cost-sharing contract, the amount then allotted by the Government to the contract plus the Contractor's corresponding share, until the Contracting Officer notifies the Contractor in writing that the amount allotted by the Government has been increased and specifies an increased amount, which shall then constitute the total amount allotted by the Government to the task order.

(f) The estimated cost shall be increased to the extent that (1) the amount allotted by the Government or, (2) if this is a cost-sharing contract, the amount then allotted by the Government to the contract plus the Contractor's corresponding share, exceeds the estimated cost specified in the task order. If this is a cost-sharing contract, the increase shall be allocated in accordance with the formula specified in the Schedule.

(g) No notice, communication, or representation in any form other than that specified in paragraph (e)(2) of this clause, or from any person other than the Contracting Officer, shall affect the amount allotted by the Government to a task order. In the absence of the specified notice, the Government is not obligated to reimburse the Contractor for any costs in excess of the total amount allotted by the Government to a task order, whether incurred during the course of the contract or as a result of termination.

(h) When and to the extent that the amount allotted by the Government to the contract is increased, any costs the Contractor incurs before the increase that are in excess of-

- (1) The amount previously allotted by the Government or;
- (2) If this is a cost-sharing contract, the amount previously allotted by the Government to the contract plus the Contractor's corresponding share, shall be allowable to the same extent as if incurred afterward, unless the Contracting Officer issues a termination or other notice and directs that that portion of the increase not required for outstanding obligations be used to cover termination or other specified expenses.
 - (i) Change orders shall not be considered an authorization to exceed the amount allotted by the Government specified in a task order, unless they contain a statement increasing the amount allotted.
 - (j) Nothing in this clause shall affect the right of the Government to terminate this contract.
 - (k) Anything in this contract (including any task order and paragraphs (e) and (g) hereof) to the contrary notwithstanding, in the event this contract is terminated in whole or in part pursuant to the Termination clause of this contract, and the amounts necessary to settle the termination of any one or more task orders will cause the costs incurred under such task order or orders to exceed the amount allotted thereto then, and in that event, the limit of the Government's obligation to reimburse the Contractor for such costs shall be the amount allotted thereto and such other available unobligated funds, as determined by NASA, which may be lawfully used for the payment of such costs. The determination by NASA as to the availability of unobligated funds shall not be subject to appeal by the Contractor under the Dispute clause of this contract.

(End of clause)

**I-12 TERMINATION (COST-REIMBURSEMENT) (FAR 52.249-6) (SEP 1996)
(DEVIATION)**

- (a) The Government may terminate performance of work under this contract in whole or, from time to time, in part, if the Contracting Officer determines that a termination is in the Government's interest.
- (b) The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination.
- (c) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:
 - (1) Stop work as specified in the notice.
 - (2) Place no further subcontracts or orders (referred to as subcontracts in this clause), except as necessary to complete the continued portion of the contract.
 - (3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts, the cost of which would be reimbursable in whole or in part, under this contract; approval or ratification will be final for purposes of this clause.

(6) Transfer title (if not already transferred) and, as directed by the Contracting Officer, deliver to the Government-

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated;

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government; and

(iii) The jigs, dies, fixtures, and other special tools and tooling acquired or manufactured for this contract, the cost of which the Contractor has been or will be reimbursed under this contract.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in paragraph (c)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(d) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(e) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days,

the Government will accept the items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(f) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(g) Subject to paragraph (f) of this clause, the Contractor and the Contracting Officer may agree on the whole or any part of the amount to be paid (including an allowance for fee) because of the termination. The contract shall be amended, and the Contractor paid the agreed amount.

(h) If the Contractor and the Contracting Officer fail to agree in whole or in part on the amount of costs and/or fee to be paid because of the termination of work, the Contracting Officer shall determine, on the basis of information available, the amount, if any, due the Contractor, and shall pay that amount, which shall include the following:

(1) All costs reimbursable under this contract, not previously paid, for the performance of this contract before the effective date of the termination, and those costs that may continue for a reasonable time with the approval of or as directed by the Contracting Officer; however, the Contractor shall discontinue those costs as rapidly as practicable.

(2) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in paragraph (h)(1) of this clause.

(3) The reasonable costs of settlement of the work terminated, including-

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(4) A portion of the fee payable under the contract, determined as follows:

(i) If the contract is terminated for the convenience of the Government, the settlement shall include a percentage of the fee equal to the percentage of completion of work

contemplated under the contract, but excluding subcontract effort included in subcontractors' termination proposals, less previous payments for fee.

(5) If the settlement includes only fee, it will be determined under paragraph (h)(4) of this clause.

(i) The cost principles and procedures in Section B-5 of this contract and Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (f), (h), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal within the time provided in paragraph (f) and failed to request a time extension, there is no right of appeal. If the Contracting Officer has made a determination of the amount due under paragraph (f), (h) or (l) of this clause, the Government shall pay the Contractor-

(1) The amount determined by the Contracting Officer if there is no right of appeal or if no timely appeal has been taken; or

(2) The amount finally determined on an appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted -

(1) All unliquidated advance or other payments to the Contractor, under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of materials, supplies, or other things acquired by the Contractor or sold under this clause and not recovered by or credited to the Government.

(l) The Contractor and Contracting Officer must agree to any equitable adjustment in fee for the continued portion of the contract when there is a partial termination. The Contracting Officer shall amend the contract to reflect the agreement.

(m) (1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any

excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) The provisions of this clause relating to fee are inapplicable if this contract does not include a fee.

(End of clause)

I-13 ADVANCE PAYMENTS (FAR 52.232-12) (MAY 2001) (ALTERNATE II) (MAY 2001) (ALTERNATE IV) (APR 1994) (ALTERNATE V) (MAY 2001) (DEVIATION)

(a) Requirements for payment. Advance payments will be made under this contract under a letter of credit. The Contractor shall withdraw cash only when needed for disbursements acceptable under this contract and report cash disbursements and balances as required by the administering office. The Contractor shall apply terms similar to this clause to any advance payments to subcontractors.

(b) Use of funds. The Contractor may use advance payment funds only to pay for properly allocable, allowable, and reasonable costs for direct materials, direct labor, and indirect costs. Determinations of whether costs are properly allocable, allowable, and reasonable shall be in accordance with generally accepted accounting principles, subject to any applicable subparts of Part 31 of the Federal Acquisition Regulation.

(c) Repayment to the Government. At any time, the Contractor may repay all or any part of the funds advanced by the Government. Whenever requested in writing to do so by the administering office, the Contractor shall repay to the Government any part of unliquidated advance payments considered by the administering office to exceed the Contractor's current requirements or the amount specified in paragraph (a) of this clause.

(d) Maximum payment. Unliquidated advance payments, unpaid interest charges, and other payments shall not exceed \$75,000,000 (not including fixed-fee, if any) for the work under this contract, or the Government may withhold further payments to the Contractor. Upon completion or termination of the contract, the Government shall deduct from the amount due to the Contractor all unliquidated advance payments and interest charges payable. The Contractor shall pay any deficiency to the Government upon demand.

(e) Interest. No interest shall be charged to the prime Contractor for advance payments, except during a period of withholding of advance payment as described in (h) below. The terms of this paragraph concerning interest charges for advance payments shall not apply to the prime Contractor.

(1) The Contractor shall pay interest to the Government on the daily unliquidated advance payments at the daily rate specified in paragraph (e)(3) of this clause. Interest shall be computed at the end of each calendar month for the actual number of days involved. For the purpose of computing the interest charge, the following shall be observed:

(i) Advance payments shall be considered as increasing the unliquidated balance as of the date of the advance payment check.

(ii) Repayments by Contractor check shall be considered as decreasing the unliquidated balance as of the date on which the check is received by the Government authority designated by the Contracting Officer.

(iii) Liquidations by deductions from payments to the Contractor shall be considered as decreasing the unliquidated balance as of the dates on which the Contractor presents to the Contracting Officer full and accurate data for the preparation of each voucher. Credits resulting from these deductions shall be made upon the approval of the reimbursement vouchers by the Disbursing Officer, based upon the Contracting Officer's certification of the applicable dates.

(2) Interest charges resulting from the monthly computation shall be deducted from any payments on account of the fixed-fee due to the Contractor. If the accrued interest exceeds the payment due, any excess interest shall be carried forward and deducted from subsequent payments of the contract price or fixed-fee. Interest carried forward shall not be compounded. Interest on advance payments shall cease to accrue upon (i) satisfactory completion or (ii) termination of the contract for the convenience of the Government. The Contractor shall charge interest on advance payments to subcontractors in the manner described above and credit the interest to the Government. Interest need not be charged on advance payments to nonprofit educational or research subcontractors for experimental, developmental, or research work.

(3) If interest is required under this contract, the Contracting Officer shall determine a daily interest rate based on the rate established by the Secretary of the Treasury under Pub. L. 92-41 (50 U.S.C. App., 1215(b)(2)). The Contracting Officer shall revise the daily interest rate during the contract period in keeping with any changes in the cited interest rate.

(f) Lien on property under contract.

(1) All advance payments under this contract, together with interest charges, shall be secured, when made, by a lien in favor of the Government, paramount to all other liens, on the supplies or other things covered by this contract and on all material and other property acquired for or allocated to the performance of this contract, except to the extent that the Government by virtue of any other terms of this contract, or otherwise, shall have valid title to the supplies, materials, or other property as against other creditors of the Contractor.

(2) The Contractor shall identify, by marking or segregation, all property that is subject to a lien in favor of the Government by virtue of any terms of this contract in such a way as to indicate that it is subject to a lien and that it has been acquired for or allocated to performing this contract. If, for any reason, the supplies, materials, or other property are not identified by marking or segregation, the Government shall be considered to have a lien to the extent of the Government's interest under this contract on any mass of property with which the supplies, materials, or other property are commingled. The Contractor shall maintain adequate accounting control over the property on its books and records.

(3) If, at any time during the progress of the work on the contract, it becomes necessary to deliver to a third person any items or materials on which the Government has a lien, the Contractor shall notify the third person of the lien and shall obtain from the third person a receipt in duplicate acknowledging the existence of the lien. The Contractor shall provide a copy of each receipt to the Contracting Officer.

(4) If, under the termination clause, the Contracting Officer authorizes the contractor to sell or retain termination inventory, the approval shall constitute a release of the Government's lien to the extent that-

(i) The termination inventory is sold or retained; and

(ii) The sale proceeds or retention credits are applied to reduce any outstanding advance payments.

(g) Insurance.

(1) The Contractor shall maintain with responsible insurance carriers-

(i) Insurance on plant and equipment against fire and other hazards, to the extent that similar properties are usually insured by others operating plants and properties of similar character in the same general locality;

(ii) Adequate insurance against liability on account of damage to persons or property; and

(iii) Adequate insurance under all applicable workers' compensation laws.

(2) Until work under this contract has been completed and all advance payments made under the contract have been liquidated, the Contractor shall-

(i) Maintain this insurance;

(ii) Maintain adequate insurance on any materials, parts, assemblies, subassemblies, supplies, equipment, and other property acquired for or allocable to this contract and subject to the Government lien under paragraph (f) of this clause; and

(iii) Furnish any evidence with respect to its insurance that the administering office may require.

(h) Withholding of advance payments.

(1) If any of the following events occur, the Government may, by written notice to the Contractor, withhold further payments on this contract:

(i) A finding by the administering office that the Contractor has failed to-

(A) Observe any of the conditions of the advance payment terms;

(B) Comply with any material term of this contract;

(C) Make progress or maintain a financial condition adequate for performance of this contract;

(D) Limit inventory allocated to this contract to reasonable requirements;

or

(E) Avoid delinquency in payment of taxes or of the costs of performing this contract in the ordinary course of business.

(ii) The appointment of a trustee, receiver, or liquidator for all or a substantial part of the Contractor's property, or the institution of proceedings by or against the Contractor for bankruptcy, reorganization, arrangement, or liquidation.

(iii) The commission of an act of bankruptcy.

(2) If any of the events described in paragraph (h)(1) of this clause continue for 30 days after the written notice to the Contractor, the Government may take any of the following additional actions:

(i) Charge interest, in the manner prescribed in paragraph (e) of this clause, on outstanding advance payments during the period of any event described in paragraph (h)(1) of this clause.

(ii) Demand immediate repayment by the Contractor of the unliquidated balance of advance payments.

(iii) Take possession of and, with or without advertisement, sell at public or private sale all or any part of the property on which the Government has a lien under this contract and, after deducting any expenses incident to the sale, apply the net proceeds of the sale to reduce the unliquidated balance of advance payments or other Government claims against the Contractor.

(3) The Government may take any of the actions described in paragraphs (h)(1) and (h)(2) of this clause it considers appropriate at its discretion and without limiting any other rights of the Government.

(i) Prohibition against assignment. Notwithstanding any other terms of this contract, the Contractor shall not assign this contract, any interest therein, or any claim under the contract to any party.

(j) Information and access to records. The Contractor shall furnish to the administering office (1) monthly or at other intervals as required, signed or certified balance sheets and profit and loss statements, and, (2) if requested, other information concerning the operation of the contractor's business. The Contractor shall provide the authorized Government representatives proper facilities for inspection of the Contractor's books, records, and accounts.

(k) Other security. The terms of this contract are considered to provide adequate security to the Government for advance payments; however, if the administering office considers the security inadequate, the Contractor shall furnish additional security satisfactory to the administering office, to the extent that the security is available.

(l) Representations. The Contractor represents the following:

(1) The balance sheet, the profit and loss statement, and any other supporting financial statements furnished to the administering office fairly reflect the financial condition of the Contractor at the date shown or the period covered, and there has been no subsequent materially adverse change in the financial condition of the Contractor.

(2) No litigation or proceedings are presently pending or threatened against the Contractor, except as shown in the financial statements.

(3) The Contractor has disclosed all contingent liabilities, except for liability resulting from the renegotiation of defense production contracts, in the financial statements furnished to the administering office.

(4) None of the terms in this clause conflict with the authority under which the Contractor is doing business or with the provision of any existing indenture or agreement of the Contractor.

(5) The Contractor has the power to enter into this contract and accept advance payments, and has taken all necessary action to authorize the acceptance under the terms of this contract.

(6) The assets of the Contractor are not subject to any lien or encumbrance of any character except for current taxes not delinquent, and except as shown in the financial statements furnished by the Contractor. There is no current assignment of claims under any contract affected by these advance payment provisions.

(7) All information furnished by the Contractor to the administering office in connection with each request for advance payments is true and correct.

(8) These representations shall be continuing and shall be considered to have been repeated by the submission of each invoice for advance payments.

(m) Covenants. To the extent the Government considers it necessary while any advance payments made under this contract remain outstanding, the Contractor, without the prior written consent of the administering office, shall not-

(1) Mortgage, pledge, or otherwise encumber or allow to be encumbered, any of the assets of the Contractor now owned or subsequently acquired, or permit any preexisting mortgages, liens, or other encumbrances to remain on or attach to any assets of the Contractor which are allocated to performing this contract and with respect to which the Government has a lien under this contract;

- (2) Sell, assign, transfer, or otherwise dispose of accounts receivable, notes, or claims for money due or to become due;
- (3) Declare or pay any dividends, except dividends payable in stock of the corporation, or make any other distribution on account of any shares of its capital stock, or purchase, redeem, or otherwise acquire for value any of its stock, except as required by sinking fund or redemption arrangements reported to the administering office incident to the establishment of these advance payment provisions;
- (4) Sell, convey, or lease all or a substantial part of its assets;
- (5) Acquire for value the stock or other securities of any corporation, municipality, or Governmental authority, except direct obligations of the United States;
- (6) Make any advance or loan or incur any liability as guarantor, surety, or accommodation endorser for any party;
- (7) Permit a writ of attachment or any similar process to be issued against its property without getting a release or bonding the property within 30 days after the entry of the writ of attachment or other process;
- (8) Pay any remuneration in any form to its directors, officers, or key employees higher than rates provided in existing agreements of which notice has been given to the administering office, accrue excess remuneration without first obtaining an agreement subordinating it to all claims of the Government, or employ any person at a rate of compensation over \$(See H-57) a year;
- (9) Change substantially the management, ownership, or control of the corporation;
- (10) Merge or consolidate with any other firm or corporation, change the type of business, or engage in any transaction outside the ordinary course of the Contractor's business as presently conducted;
- (11) Deposit any of its funds except in a bank or trust company insured by the Federal Deposit Insurance Corporation or a credit union insured by the National Credit Union Administration;
- (12) Create or incur indebtedness for advances, other than advances to be made under the terms of this contract, or for borrowings;
- (13) Make or covenant for capital expenditures exceeding \$(See H-57) in total;
- (14) Permit its net current assets, computed in accordance with generally accepted accounting principles, to become less than \$(See H-57); or
- (15) Make any payments on account of the obligations listed below, except in the manner and to the extent provided in this contract: [See H-57]

(End of Clause)

I-14 APPROVAL OF CONTRACT (FAR 52.204-1) (DEC 1989)

This contract is subject to the written approval of the NASA Administrator and shall not be binding until so approved.

(End of Clause)

[END OF SECTION]

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

**J-1 LIST OF DOCUMENTS, EXHIBITS, AND ATTACHMENTS (ARC 52.211-90)
(FEB 1997)**

(a) The following documents, exhibits, and attachments are included in the solicitation and resulting contract. Representations and certifications completed by the Contractor in response to this solicitation are incorporated by reference in the resulting contract at time of award.

Title	Date	No. of Pages
Attachment A - Foreign Travel	November 26, 2002	4
Attachment B - NASA-JPL Policies and Procedures Regarding Public Information Programs and New Issuances	November 26, 2002	3
Attachment C – Bibliography of NASA Directives Contractually Implemented	November 26, 2002	8
Attachment D - Small Business Subcontracting Plan	November 26, 2002	8
Attachment E - Education Programs and Activities	November 26, 2002	3
Attachment F - DD Form 254	November 26, 2002	3
Attachment G - Agreement and Conditions for Evaluation of Proposals	November 26, 2002	1
Appendix 1 - NASA and Caltech Understanding Concerning the Jet Propulsion Laboratory	November 26, 2002	4

(b) The following documents, exhibits, and attachments are included only in the solicitation.

Title	Date	No. of Pages
Section K – Representations, Certifications, and Other Statements of Offerors	November 7, 2002	15
Section L – Instructions, Conditions, and Notices to Offerors	August 30, 2002	4
RFP7-0001, Section L-2, NFS 1852.215-78, Make or Buy Program Requirements	November 18, 2002	13

(End of Clause)

[END OF SECTION]

Contract No. NAS7-03001

Modification No. 37

ATTACHMENT A

FOREIGN TRAVEL

Attachment A covers the coordination, review and approval of foreign travel by Contractor employees and others (other than employees of subcontractors) on official business where the cost is paid by others or is chargeable to the Contract.

(a) Foreign Travel Approval Requirements

(1) NASA Travel. All foreign travel must be reviewed and approved in advance by the Contractor's Director, Deputy Director, Associate Director or the Director of the applicable Contractor Directorate. The Contractor will identify for the NASA Headquarters CFO and Office of External Relations (OER) a central JPL Foreign Travel Office, including a single point-of-contact, for receipt, review, coordination, and processing of all foreign travel by the Contractor. The Contractor shall provide to the NASA OER (and also to Mission Directorates in appropriate cases) advance e-mail notice regarding all Contractor foreign travel. Such e-mail notice to NASA shall include a copy of the JPL country clearance cable(s).

For all foreign travel, the JPL Foreign Travel Office will prepare and submit to the Department of State country clearance cables 10 working days before scheduled departure or when emergency travel is required, as soon as practicable. Country clearance cables may be transmitted via e-mail to appropriate State Department Desk Officers for concurrence and approval. Upon approval by the appropriate State Department Desk Officer, the clearance cable is to be sent to the Communications Center at the Department of State for distribution to the appropriate Embassy.

The Contractor's Management is authorized to approve or deny all foreign travel.

The Contractor will follow NASA's guidelines on attendance limits for professional meetings, except where otherwise authorized by the Contractor's Director or Deputy Director. NASA may establish attendance limits for specific professional meetings (e.g., COSPAR, IAF) for the entire Agency, which will be binding on the Contractor.

If the foreign travel involves the presentation of a formal paper, the request package to the JPL Foreign Travel Office shall include a copy of the proposed paper or at a minimum it's abstract which has been reviewed by the JPL Office of Export Compliance.

(2) Non-NASA Sponsored Travel. The Contractor shall provide e-mail notice to the NMO Contracting Officer before undertaking or authorizing any non-NASA sponsored foreign travel.

(b) Trip Feedback from Foreign Travel to "Designated Areas" or Travel to Non-Designated Areas Involving Communications With Representatives of "Designated Areas".

For foreign travel to a country on the "Designated Area List" or where the travel involved communications with nationals or representatives of a country on the "Designated Area List", the Contractor shall provide feedback to NASA's Office of External Relations, if requested, as follows:

- brief summary of any substantive discussions held with nationals or representatives of countries on the Designated Area List and the names and affiliations of the individuals
- any requests for further communication, visits to NASA installations or information made by such individuals
- any actions accepted by the Contractor-approved traveler(s) as a result of such discussions
- any other information deemed important by the Contractor-approved traveler
- a copy of any trip summary or report that the traveler may prepare independent of a requirement of this contract.

(c) Foreign Travel Briefing.

Individuals need to receive and acknowledge receipt of a foreign travel awareness information document from JPL Security prior to foreign travel. This applies to both Caltech personnel traveling under an Interdivisional Authorization and JPL personnel.

(d) Travelers are responsible for obtaining appropriate medical clearance for all foreign travel.

(e) The JPL Foreign Travel office will provide to the NASA Headquarters OER weekly reports of all approved foreign travel.

(f) The Contractor does not accept the NASA FMR 12, Travel, in this Contract.

b. All other terms and conditions shall remain unchanged.

END OF MODIFICATION NO. 37

ATTACHMENT BNASA-JPL POLICIES AND PROCEDURES
REGARDING
PUBLIC INFORMATION PROGRAMS AND NEWS ISSUANCES

(a) Introduction. Consistent with Section 203 (a) (3) of the Space Act and the Freedom of Information Act (5 USC 552) it is NASA Policy to carry out a public affairs program designed to make available factual and timely information concerning its activities, its programs, and their results. In carrying out its statutory responsibilities NASA encourages its contractors not only to respond to queries from media, but to carry out a positive program of dissemination of factual and timely information relating to work being done for NASA. In doing so, contractors are expected to coordinate their activities with NASA Public Affairs officials. Review and approval of any material submitted to NASA does not constitute approval to expend funds; expenditures for information dissemination and advertising remain subject to applicable cost principles under the contract.

(b) Applicability. The policies and procedures set forth herein apply to all public affairs activities and news issuances made by JPL or by JPL employees, bearing on work being performed by JPL for the civil aeronautics and space program of the United States. News issuances include information (textual and/or audiovisual) intended for or distributed to the general public (including via the Internet); i.e., to other than the technical and scientific communities (information of this type being covered under paragraph C-1 (e) rather than H-8 of the Schedule). Information disseminated exclusively for internal JPL use is not considered a news issuance. Examples of news issuances include news releases, fact sheets, press kits, transcripts, speech reprints, notes to editors, feature articles, biographics, etc. News issuances do not include educational products and general information disseminated to the public as a part of routine JPL outreach activities. However, such products and information must be consistent with more news-oriented products coordinated through the clearance process for news issuances. House organs published with funds provided under this contract are considered news issuances only when they are used to disseminate information to external audiences. Guidelines for news issuances by subcontractors of JPL, including lower tier subcontractors, shall be in accordance with guidelines established by the NASA Headquarter's Office of Public Affairs.

(c) Clearance Requirements for News Issuances.

(1) Except as otherwise provided in this contract, information may be released to the public by JPL without prior NASA clearance, subject to the provisions of subparagraph (2) below.

(2) Prior NASA clearance is required for all public releases by JPL involving:

(i) discussion of launch vehicle selections or launch schedules.

(ii) planning, scheduling, and managing major development programs or space flight missions.

(iii) proposed budgets and financial plans.

(iv) proposed organization of effort for the execution of NASA programs, including management of projects and plans for use of NASA prime contractors or subcontractors.

(v) information on projects for which a NASA Center or an outside agency has the primary responsibility, except that this shall not be construed as a limitation on speeches or oral statements made by a Director for a Directorate or higher official of the JPL.

(vi) releases having an estimated total cost, including in-house effort, in excess of \$10,000; for example, exhibits, films and pamphlets.

(vii) preferred or proprietary arrangements with any particular segment of the information media, publishing or entertainment industries, or any individual elements thereof; provided, however, this requirement in no way limits the Contractor's rights under FAR 52.227-14, Rights in Data--General (ALT II, III, V).

(viii) information on international matters or for release outside the United States.

(ix) information intended for national release, or any information which, because of the nature of the subject matter or timing involved, will, in the opinion of the Director of JPL, be likely to attract more than routine local or regional public interest.

(3) Where prior NASA clearance is required, requests will be directed to the NASA Assistant Administrator for Public Affairs or his designee. Requests will be made in writing, provided, however, that if time is critical, telephone requests may be made.

(4) The Director of JPL will establish guidelines and procedures covering public release of information at JPL. These guidelines and procedures will be consistent with the Space Act and the Freedom of Information Act and will follow the spirit and intent of 14 CFR Part 1213 Subpart 1.

(d) The Public Engagement Plan.

(1) General. Public affairs support of a significant program milestone or event such as a rollout, first flight, launch, space rendezvous/encounter, fly-by, high public-interest mission, etc., generally requires preparation and implementation of a Public Engagement Plan. The Public Engagement Plan sets forth the public affairs support activities, procedures, responsibilities; and the contractor-vs.-government furnished personnel, supplies, equipment, services and funding. Support activities and requirements usually include a combination of, or all of the following; on-site newsroom operation; guest invitations and operations; press conferences; news kits and news releases; still photo, motion picture and video releases; unique equipment and special supplies; supplemental personnel and transportation; NASA feed to television networks, etc.

(2) Preparation of the Public Engagement Plan. Public Engagement Plans will be prepared by the NASA Office of Public Affairs, with input and assistance from JPL. JPL will respond to requests for assistance in the development of the Public Engagement Plan and assume its operational role and responsibilities upon implementation of the Plan.

(e) Identification of Releases.

(1) All written releases pertaining to NASA programs will identify NASA in a larger format than the JPL and/or the California Institute of Technology.

(2) All substantive releases which pertain to work being sponsored by NASA will clearly reflect this sponsorship and the NASA/Caltech contractual relationship.

(f) NASA Issuances Applicable to Public Affairs.

The following NASA Issuances are contractually binding and obligatory:

(1) NPD 1383.1A, Release and Management of Audiovisual Products and Services, dated December 19, 1999

(2) NPD 1383.2, NASA Assistance to Non-Government, Entertainment-Oriented Motion Picture, Television, Video and Multimedia Production/Enterprises and Advertising, dated October 7, 1999

(3) NPG 1387.1, NASA Exhibits Program, dated January 9, 1999

(4) NPD 7620.1G, Official Names for Major NASA Projects, February 14, 2000

ATTACHMENT C

Bibliography of NASA and Other Issuances Contractually Implemented

NASA ISSUANCE	TITLE AND DATE OF ISSUANCE	CONTRACT LOCATION
NASA 14 CFR 1204.14	Use of NASA Airfield Facilities By Aircraft Not Operated for the Benefit of the Federal Government, dated July 1991	H-7(c)(2)(iii)
NPD 1000.5*	Policy for NASA Acquisition, Effective Date: January 15, 2009	H-27 (a)(33) (Mod 69)
NPD 1360.2	Initiation and Development of International Cooperation in Space and Aeronautics Programs, dated April 16, 1999	H-27(a)(2)
NPD 1383.1A	Release and Management of Audiovisual Products and Services, dated December 19, 1999	Attachment B, (f)(1)
NPD 1383.2	NASA Assistance to Non-Government Entertainment-Orientated Motion Picture, Television, Video, and Multimedia Production/Enterprises and Advertising, dated October 7, 1999	Attachment B, (f)(2)
NPG 1387.1	NASA Exhibits Program, dated January 9, 1999	Attachment B, (f)(3)
NPD 1392.1C	Conduct of the NASA Education Program, December 9, 1999	Attachment E, (c)(1)
NPR 1441.1D*	NASA Records Retention Schedules, (w/ Change 3, 1/3106)	H-16(f)(1) H-16(f)(3) (Modification No. 33)
NPD 1440.6G*	NASA Records Management, dated April December 12, 2002,	H-16(f)(1) (Modification No. 33)
NPD 1490.1F	NASA Printing, Duplicating, Copying, Forms, and Mail Management, dated June 29, 2001	H-29(e)
NPG 1490.5A	NASA Procedural Guidance for Printing, Duplicating, and Copying Management, dated July 1997	H-29(e)
NPD 1600.2A	NASA Security Policy, dated April 20, 1998	H-37(a)(1)
NPG 1620.1B*	Security Procedures and Guidelines, dated September 13, 2002	H-37 (a)(2); I-7(d)(1) (Mod 43)
NSS/WS-1740.10	Safety Standard for Underwater Facility and Non-Open Water Operations, dated May 28,	H-27(a)(25)

	1997	
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NASA ISSUANCE	TITLE AND DATE OF ISSUANCE	CONTRACT LOCATION
NSS 1740.12	NASA Safety Standard for Explosives, Propellants, and Pyrotechnics, dated August 1993	H-7(c)(7); H-27(a)(26)
NSS 1740.15	Safety Standard for Oxygen and Oxygen Systems, dated January 1996	H-27(a)(27)
NSS 1740.16	Safety Standard for Hydrogen and Hydrogen Systems, dated February 12, 1997	H-27(a)(28)
NPD 1800.2A*	NASA Occupational Health Program, dated January 16, 2001	H-10
NPG 1820.1* Section 3.3 only	Hearing Conservation, dated March 2, 2001	H-10
NPG 2200.2A* Appendix Four	Guidelines for Documentation, Approval, and Dissemination of NASA STI dated September 3, 1997	C-1(e)(8) H-32 (a)(4)(i)
NPD 2530.1E	Monitoring or Recording of Telephone or Other Conversations, dated August 29, 2002	H-27(a)(6)
NPD 2570.5B	Radio Frequency Spectrum Management, dated March 18, 1998	H-27(a)(8)
NPD 2800.1	Managing Information Technology, dated March 23, 1998	H-27(a)(9)
NPG 2800.1*	Managing Information Technology, September 17, 1998	H-27(a)(10)
NPD 2810.1	Security of Information Technology, dated October 1, 1998	H-37(a)(3)
NPR 2810.1A*	Security of Information Technology, dated May 16, 2006	H-32(a)(2); H-37(a)(4) (Mod 43)
NPG 4310.1*	Identification and Disposition of NASA Artifacts, dated March 16, 1999	H-27(a)(3)
FAA Advisory Circular 150/5390-2A	Heliport Design, dated January 20, 1994	H-7(c)(2)(iv)
DOD 5220.22-M and Supplements	National Industrial Security Program Operating Manual (NISPOM), dated January 1995	H-37
NPD 7120.4B*	Program/Project Management, dated December 6, 1999	G-11(a)(1), G-11(b)

NPR 7120.5D *	NASA Space Flight Program and Project Management Requirements, dated March 6, 2007.	E-2(a), E-2 (c)(1); G-11(a), G-11(a)(2); G-11(e); H-7(c)(3); H-37(a)(2)(vi)(A); (Modification 51)
NPR 7123.1A*	Systems Engineering Processes and Requirements, dated March 26, 2007	H-63 (Modification No. 65)

NASA ISSUANCE	TITLE AND DATE OF ISSUANCE	CONTRACT LOCATION
NPG 7500.1	NASA Technology Commercialization Process, dated December 20, 2001	C-1(e)(13)(ii)
NPD 7500.2 *	NASA Technology Commercialization Policy, dated March 24, 2000	H-27(a)(5)
NPD 7620.1G	Official Names for Major NASA Projects, dated February 14, 2000	Attachment B, (f)(4)
NPR 7900.3B*	NASA Aircraft Operations Management Manual,, dated June 14, 2007	H-7 (c)(2)(ii); H- 51(a)(2); H-51(b) (Mod 48) (Mod 52)
NPD 7900.4B*	NASA Aircraft Operations Management, dated April 27, 2004	H-51(a)(3) (Mod 48)
41 CFR 102-33.5 through 102-33.460	Management of Government Aircraft, revised July 1, 2006	H-51(a)(1) (Mod 48)
41 CFR 101-37.000	Cross Reference to the Federal Management Regulation (FMR) (41 CFR Chapter 102, part 102-33 and the Federal Travel Regulation (FTR) (41 CFR Chapters 300-304, parts 300-3, 301-10 and 301-70)), revised July 1, 2006	H-51(a)(4) (Mod 48)
41 CFR 300-3	Glossary of Terms, revised July 1, 2006	H-51(a)(4) (Mod 48)
41 CFR Part 301-10.260 through 301-10.266	Travel on Government Aircraft, revised July 1, 2006	H-51(a)(4) (Mod 48)
41 CFR 301-10.10.403	What is the difference between a Government aircraft and an aircraft hired as a special conveyance?, revised July 1, 2006	H-51(a)(4) (Mod 48)
41 CFR Part 300-70.800	Subpart I- Policies and Procedures for Agencies that Authorize Travel on Government Aircraft, revised July 1, 2006	H-51(a)(4) (Mod 48)
41 CFR Part 300-70.900	Subpart J-Policies and Procedures for Agencies that Own or Hire Government Aircraft for Travel, revised July 1, 2006.	H-51 (a)(4) (Mod 48)

* Denotes conditional acceptance. Please see contract source for applicable conditions

Title 49 U.S.C. Sections 40102 (a)(41) and 40125	Definition of Public Aircraft, P.L. 106-181	H-51(a)(5) (Mod 48)
NPR 7150.2A*	NASA Software Engineering Requirements, dated November 19, 2009	H-64 (Mod 69)
NPG 8000.4	Risk Management Procedures and Guidelines, dated April 25, 2002	H-27(a)(11)
NPD 8020.7E	Biological Contamination Control for Outbound and Inbound Planetary Spacecraft, dated February 19, 1999	H-27(a)(1)
NPG 8020.12B	Planetary Protection Provisions for Robotic Extraterrestrial Missions, dated April 16, 1999	H-27(a)(13)
NPD 8500.1B*	NASA Environmental Management, dated December 20, 2007	H-8 (c)(1) (Mod 69)
NPR 8530.1A*	Affirmative Procurement Program and Plan for Environmentally Preferable Products (REVALIDATED 4/3/09 w/change 3), dated June 4, 2004	H-8(c)(3) (Mod 69)
NPR 8553.1B*	NASA Environmental Management System, dated September 22, 2009	H-46(b)(5) (Mod 69)
NPG 8570.1	Energy Efficiency and Water Conservation Technologies and Practices, dated March 15, 2001	H-9(b)(1)
NPR 8580.1*	Implementing the National Environmental Policy Act (NEPA) and Executive Order 12114, dated November 26, 2001	H-8 (c)(4) (Mod 69)
NPR 8590.1*	NASA Environmental Compliance and Restoration (ECR) Program, Effective Date June 14, 2007	H-8 (b)(2) (Mod 69)
NPD 8610.6E	Graphic Markings on Space Transportation Vehicles, U.S. Components of the International Space Station Component Systems, and Payloads, dated July 12, 2002	H-44

NPR 8621.1B*	NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping, w/Change 4 (11/02/2009) dated May 23, 2006	E-2(e)(2); H-7(d)(3); H-7(i) (Mod 69)
FAA Order 8700.1 Chapter 61	Evaluation and Surveillance of Heliports, dated July 25, 1997	H-7(c)(2)(v)
NPR 8705.5	Probabilistic Risk Assessment (PRA) Procedures for NASA Programs and Projects, dated July 12, 2004	H-30(c) (Mod 69)
NPD 8710.1A	Emergency Preparedness Program, dated January 16, 2002	E-2(e)(1), H-7(c)(8)

NASA ISSUANCE	TITLE AND DATE OF ISSUANCE	CONTRACT LOCATION
NPD 8710.5D*	NASA Policy for Pressure Vessels and Pressurized Systems, dated March 12, 2008	E-2(e)(5); H-7(c)(10) (Mod 69)
NPG 8715.2	NASA Emergency Preparedness Plan Procedures and Guidelines, dated December 22, 1999	H-27(a)(29)
NPR 8715.3C*	NASA General Safety Program Requirements, dated March 12, 2008 (w/Change 4 dated 7/20/09)	H-7(c)(1); H-7(c)(2)(i); H-7(c)(4) (Mod 69)
NPR 8715.5*	Range Safety Program, dated July 8, 2005	H-7 (h) (Mod 21)
NPR 8715.6a*	NASA Procedural Requirements for Limiting Orbital Debris with Change 1, dated May 14, 2009	E-2(d) (Mod 69)
NASA-STD-8719.9	Standard for Lifting Devices and Equipment, dated May 9, 2002	E-2(e)(3)
NASA STD 8719.7	Facility System Safety Guidebook, dated January 1998	H-7(c)(9)
NASA STD 8719.8	Expendable Launch Vehicle Payload Safety Review Process Standard, dated June 23, 1998	H-27(a)(17)
NASA STD 8719.11	NASA Safety Standard for Fire Protection, dated December 19, 2000	H-7(c)(6); H-7(c)(9)
NASA-STD-8719.13a	Software Safety, dated September 15, 1997	H-27(a)(30)
NASA-STD 8719.14*	Process for Limiting Orbital Debris, With Change 4, September 14, 2009	E-2(d) (Mod 69)
NASA-STD-8719.17, Revision A*	NASA Requirements for Ground-Based Pressure Vessels and Pressurized Systems (PVS) Approved 11/06/09	E-2(e)(5); H-7(c)(10) (Mod 69)
NPD 8710.2C	NASA Safety and Health Program Policy, dated April 24, 2002	H-27(a)(15)
NPD 8710.3	NASA Policy for Limiting Orbital Debris Generation, dated May 29, 1997	H-27(a)(16)
NPG 8715.1	NASA Safety and Health Handbook Occupational Safety and Health Programs, dated August 9, 1999	H-27(a)(18)
NPD 8720.1	NASA Reliability and Maintainability (R&M) Program, dated October 15, 1997	E-2(e)(4)

NPD 8730.1	Metrology and Calibration, dated May 22, 1998	H-27(a)(4)
NPD 8730.3	NASA Quality Management System Policy (ISO 9000), dated June 8, 1998	H-27(a)(31)
NPD 8730.4	Software Independent Verification and Validation (IV&V) Policy, dated August 1, 2001	H-27(a)(32)
NPG 8735.1A	Procedures For Exchanging Parts, Materials, and Safety Problem Data Utilizing the Government-Industry Data Exchange Program and NASA Advisories, dated August 22, 2002	E-2(f)(3); H-27(a)(19)

NASA ISSUANCE	TITLE AND DATE OF ISSUANCE	CONTRACT LOCATION
NASA-STD-8739.1	Workmanship Standard for Staking and Conformal Coating of Printed Wiring Boards and Electronic Assemblies, dated August 6, 1999	H-27(a)(20)
NASA-STD-8739.2	NASA Workmanship Standard for Surface Mount Technology, dated August 31, 1999	H-27(a)(21)
NASA STD 8739.3	Soldered Electrical Connections, dated January 18, 2001	H-27(a)(2)
NASA STD 8739.4	Crimping, Interconnecting Cables, Harnesses, and Wiring, dated February 9, 1998	H-27(a)(23)
NASA STD 8739.5	Fiber Optic Terminations, Cable Assemblies, and Installation, dated February 9, 1998	H-27(a)(24)
NPD 8800.14A	Policy for Real Property Management, dated April 1, 1997	C-4(b)(1)
NPG 8800.15A	Real Estate Management Program Implementation Manual, dated September 1, 1998	C-4(b)(2)
NPD 8820.2	Design and Construction of Facilities, dated December 2, 1998	C-4(b)(3)
NPG 8820.2C	Facilities Project Implementation Handbook, dated April 28, 1999	C-4(a)(5); C-4(a)(6); C-4(a)(8); C-4(b)(4); G-16 (a)(3)
NPD 8820.3	Facility Sustainable Design, dated August 21, 2002	C-4(b)(7)
NPD 8831.1C *	Management of Facilities Maintenance, dated May 29, 2002	C-4(b)(5)
NPG 8831.2D *	Facilities Maintenance Management, dated July 25, 2001	C-4(b)(6)
NPD 8900.4C	NASA Use of Global Positioning System Precise Positioning Service, dated April 27, 1999	H-27(a)(14)
NPR 1371.2A*	Access to NASA Installations or Facilities by Foreign Nationals or US Citizens Who are Reps of Foreign Entities, dated April 7,	H-37 (a) in accordance with Modification 15

	2003, with administrative changes dated March 29, 2004	
Procurement Information Circular (PIC) 06 -01	Personal Identity Verification (PIV) of Contractor Personnel Steps 1 through 7, January 18, 2006	H-37 (Unilateral Modification No. 39)
FMM 9121-20	Unique Project Number (UPN) and Nonprogrammatic Codes (Digits 1-3)	G-2(a)(1)
FMM 9121-21	UPN Subsidiary Coding (Digits 4-7)	G-2(a)(1)
FMM 9121-22	UPN Subsidiary Coding (Digits 8-11)	G-2(a)(1)

NASA ISSUANCE	TITLE AND DATE OF ISSUANCE	CONTRACT LOCATION
FMM 9121-30	Facility Project Number (FPN) (Digits 1-4)	G-2(a)(2)
FMM Appendix 9280-2A	Instructions to Recipient Organizations for Acquiring Advance Payments by Letter of Credit	B-6(b)
SPI 3-04-1	External Release of Scientific or Technical Information, dated June 1993	C-1(e)(8)
JPL Handbook	D-11119A, Alerts/Concerns Handbook	E-2(f)(3)
Presidential Memorandum	Energy Conservation at Federal Facilities and Related Information, dated May 3, 2001	H-9(b)(2)
(NASA HQ) HOWI7410-J012	Environmental Compliance & Restoration Budget Formulation & Execution, dated October 31, 2000	H-8(b)(2)
Executive Order 11514	Protection and Enhancement of Environmental Quality, dated March 5, 1970	H-8(d)
Executive Order 11593	Protection and Enhancement of the Cultural Environment, dated May 13, 1971	H-8(d)
Executive Order 11988	Floodplain Management, dated May 24, 1977	H-8(d)
Executive Order 11990	Protection of Wetlands, dated May 24, 1977	H-8(d)
Executive Order 12580	Superfund Implementation, Amended by 13016 and 12777, dated August 28, 1996	H-8(d)
Executive Order 12898	Federal Actions to Address Environmental Justice in Minority Populations and Low- Income Populations, dated February 11, 1994	H-8(d)
Executive Order 12941	Seismic Safety of Existing Federally Owned or Leased Buildings, dated December 1, 1994	H-8(d)
Executive Order 13006	Locating Federal Facilities on Historic Properties in Our Nation's Central Cities, dated May 21, 1996	H-8(d)
Executive Order 13007	Indian Sacred Sites, dated May 24 1996	H-8(d)

NASA ISSUANCE	TITLE AND DATE OF ISSUANCE	CONTRACT LOCATION
Executive Order 13045	Protection of Children From Environmental Health Risks and Safety Risks, dated April 21, 1997	H-8(d)
Executive Order 13061	Federal Support of Community Efforts Along American Heritage Rivers, dated September 11, 1997	H-8(d)
Executive Order 13089	Coral Reef Protection, dated June 11, 1998	H-8(d)
Executive Order 13112	Invasive Species, dated February 3, 1999	H-8(d)
Executive Order 13123	Greening the Government Through Efficient Energy Management, dated June 3, 1999	H-9(a)
Executive Orders 13125 and 13216	Increasing Participation of Asian American and Pacific Islanders in Federal Programs, dated June 7, 1999	H-8(d)
Executive Order 13132	Federalism, dated August 4, 1999	H-8(d)
Executive Order 13149	Greening the Government Through Federal Fleet and Transportation Efficiency, dated April 21, 2000	H-53(a)
Executive Order 13150	Federal Workforce Transportation, dated April 21, 2000	H-8(d)
Executive Order 13158	Marine Protected Areas, dated May 26, 2000	H-8(d)
Executive Order 13160	Nondiscrimination on the Basis of Race, Sex, Color, National Origin, Disability, Religion, Age, Sexual Orientation, and Status as a Parent, in Federally Conducted Education and Training Program, dated June 23, 2000	H-8(d)
Executive Order 13166	Improving Access to Services with Persons with Limited English Proficiency, dated August 11, 2000	H-8(d)
Executive Order 13175	Consulting and Coordinating with Indian Tribal Governments, dated November 6, 2000	H-8(d)

NASA ISSUANCE	TITLE AND DATE OF ISSUANCE	CONTRACT LOCATION
Executive Order 13186	Responsibility for Federal Agencies to Protect Migratory Birds, dated January 10, 2001	H-8(d)
Executive Order 13196	Final Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, dated January 18, 2001	H-8(d)
Executive Orders 13211	Actions Concerning Regulations that Significantly Affect Energy Supply Distribution or Use, dated May 18, 2001	H-8(d)
Executive Order 13212	Actions to Expedite Energy-Related Projects, dated May 18, 2001	H-8(d)
Executive Order 13221	Energy Efficient Standby Power Devices, dated July 31, 2001	H-8(d)
Executive Order 13287*	Preserve America, dated March 3, 2003	H-8 (d) (Mod 69)
Executive Order 13423*	Strengthening Federal Environmental, Energy, and Transportation Management, dated January 26, 2007	H-8(d) (Mod 69)
29 U.S.C. 794 et seq.	The Rehabilitation Act of 1973, as amended	H-49(g)

ATTACHMENT D

JET PROPULSION LABORATORY
SMALL BUSINESS SUBCONTRACTING PLAN

TABLE OF CONTENTS

- (a) Percentage and Dollar Goals
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- (f) Subcontract Provisions Regarding Utilization of All Categories of Small Business Concerns
- (g) All Categories of Small Business Community Interaction

(a) Percentage and Dollar Goals.

JPL strongly supports NASA's Small Business Program and will make an aggressive effort to assist the Agency with meeting its goals.

To ensure meeting its goals, JPL has a systematic planning and control function that sets goals at the program office and technical division level, tracks progress, and implements programmatic actions during status meetings with Technical Division Small Business Representatives which are conducted by the Principal, Acquisition Operations and Planning, Engineering and Science Directorate (ESD). This role of the Principal is comparable to NASA's Small Business Technical Advisor (SBTA).

JPL's goal setting process starts at the end of the third quarter of each fiscal year. A statement of goals for the next fiscal year, expressed in terms of dollars and percentages for the following: (i) amount planned to be subcontracted; (ii) the amount planned to be subcontracted to small business; (iii) the amount planned to be subcontracted to small disadvantaged business; (iv) and the amount planned to be subcontracted to women-owned small business: will be submitted to the Contracting Officer sixty days prior to the end of the fiscal year in order that goals can be established annually by mutual agreement in accordance with paragraph (a) of Clause G-10 (Small Business Subcontracting Plan). Final goals will be established within 45 days after finalization of the NASA appropriation by Congress.

The following table will be updated annually to reflect JPL's percentage and dollar goals for FY04 through FY2008. For each fiscal year, the top amounts represent goals, and the bottom amounts are actual subcontracting dollars.

<u>Fiscal Year</u>	<u>Total Sub-contracting Base</u>	<u>Small Business Awards</u>	<u>% of Small Business to Total</u>	<u>* Small Disadv. Business Awards</u>	<u>* % of Small Disadv. to Total</u>
2004	\$600M \$700M	\$210M \$259M	35% 37%	\$90M \$79.3M	15% (Mod 4) 11.3%(Mod 10)
2005	\$600M \$662M	\$210M \$266M	35% 40%	\$90M \$73M	15% (Mod 10) 11.1% (Mod 23)
2006	\$600M \$TBD	\$180M \$TBD	30% %TBD	\$54M \$TBD	9% (Mod 23) %TBD
2007	\$TBD \$TBD	\$TBD \$TBD	%TBD %TBD	\$TBD \$TBD	%TBD %TBD
2008	\$TBD \$TBD	\$TBD \$TBD	%TBD %TBD	\$TBD \$TBD	%TBD %TBD

<u>Fiscal Year</u>	<u>*Women-Owned Business Awards</u>	<u>*% of Women-Owned Bus. to Total</u>	<u>*Socio-Economic Business Awards</u>	<u>*% Socio-Economic Business to Total</u>	<u>HUB Zone Business Awards</u>	<u>% of HUB Zone Business Awards</u>
2004	\$30M	5%	\$108M	18%	<u>\$3M</u>	<u>.5% (Mod 4)</u>
	\$43.6M	6.2%	\$118.9M	17%	<u>\$2.7M</u>	<u>.4% (Mod 10)</u>
2005	\$36M	6%	\$102M	16%	\$9M	1.5% (Mod 10)
	\$38M	5.8%	\$103.9M	15.7%	\$6.9M	1.06% (Mod 23)
2006	\$24M	4%	\$66M	11%	\$3M	0.5% (Mod 23)
	\$TBD	% TBD	\$ TBD	% TBD	\$ TBD	% TBD
2007	\$ TBD	% TBD	\$ TBD	% TBD	\$ TBD	% TBD
	\$TBD	%TBD	\$TBD	%TBD	\$TBD	%TBD
2008	\$TBD	%TBD	\$TBD	%TBD	\$TBD	%TBD
	\$TBD	%TBD	\$TBD	%TBD	\$TBD	%TBD

* Includes flow-down subcontract dollars.

(b) Principal Products and Service Areas to be Subcontracted.

The JPL Acquisition Division provides acquisition support for the Laboratory's missions involving solar systems exploration, earth sciences and applications, communications, and information systems. JPL serves as NASA's Lead Center for the Mars, Origins, Space Infrared Telescope Facility (SIRTF), and New Millennium programs. Examples of present programs with major contract activity are: Mars Surveyor, X2000, Outer Plants/Solar Probe, Space Interferometer Mission, Cloudsat, Deep Impact, and the new Terrestrial Planet Finder. JPL is also heavily involved in the development of flight instruments. The Acquisition Division supports both NASA-funded activities, and programs related to reimbursable DOD and other agency requirements. The Acquisition Division supports the Laboratory's workforce requirements with the Technical Support Effort Personnel and Secretarial Blanket contracts, other task support contracts, construction of facilities, and all institutional supplies and services. All categories of Small Businesses will have an opportunity to compete in all of these areas.

(c) Introduction and Senior Management Support of the Program Plan.

It is the policy of the JPL Business Opportunities Office that all categories of Small Businesses shall have an equitable opportunity to compete for subcontracts. This policy is consistent with the spirit and intent of PUBLIC LAW 95-507.

A major indicator of senior management's support of the Small Business Program is the appointment of the Principal, Acquisition Operations and Planning, Engineering and Science Directorate (ESD) to assist the Business Opportunities Office with administration of the Small Business Program within the Technical Divisions. The Principal provides assistance with Outreach, the Procurement Forecast, the Small Business Representatives, and internal training to technical personnel.

The Business Opportunities Office regularly coordinates with and keeps JPL management informed on the Small Business Program. The Business Opportunity Office Manager has a direct line to the Deputy Director and other members of top management to discuss key issues as the need arises. The Small Business Oversight Council comprised of the Deputy Laboratory Director; Chief Financial Officer; and Director, Engineering and Science Directorate, interface on a semi-annual basis with the Manager of the Business Opportunities Office and the Small Business representatives to provide an advisory planning activity to:

- (1) Establish annual goals and meaningful program objectives and ensure that proper emphasis and support is provided by all elements of the Laboratory on a continuing basis.
- (2) Review, modify as necessary, and approve Small Business Program plans as submitted by the Small Business Liaison Officer.
- (3) Evaluate progress on the established goals. A weekly email status on the Small Business Program is sent to the Deputy Laboratory Director; Chief Financial Officer; Director, Engineering and Science Directorate; Acquisition managers and supervisors; the Small Business and Small Disadvantaged Business Representatives; NMO-JPL; and NASA Headquarters Office of Small Business.
- (4) Discuss implementation and status of continuing NASA initiatives such as the Mentor Protégé Program, the Semi-Annual Science Forum for Small Business, the Annual Space Science Symposium, and the Prime Contractor Round Table.

In addition to these meetings, frequent interface takes place on any small business concern that requires immediate attention. JPL management is supportive of the Small Business Program and assists fully in the implementation and institutionalization of new small business and small disadvantaged business initiatives. JPL senior management participates in many small-business outreach efforts.

(d) Responsibility for Administration of the Program Plan.

Responsibility for the JPL Small Business Enterprise Program is assigned to the Manager of the Acquisition Division. The Manager of the Business Opportunities Office is responsible for administration of the Program. The Program is implemented on a day-to-day basis by the Small Business Administrators, the Small Business Enterprise Program Representatives in each of the user Divisions, and Acquisition Division Buyers and Negotiators.

(e) Program Objective and Description of Efforts.

The overall objective of the program is to assure that all categories of small business have an equitable opportunity to compete for subcontracts. The following are continuing efforts that contribute towards achieving our objective:

- (1) Identifying all categories of qualified small business suppliers by reviewing all categories of small business listings and directories prepared by Government agencies, prime contractors, private sector companies, and all categories of small business organizations.

For example, the Business Opportunities Office uses PRO-NET (Procurement Marketing and Access Network) the Small Business Administration's Internet-based database of information on more than 171,000 small businesses. JPL Acquisition and end-user personnel are instructed to use PRO-NET for source list development. For many years the Business Opportunities Office has subscribed to PASS (Procurement Automated Source System) to assist in small and small business disadvantaged source list development.

(2) Providing practical assistance to all categories of the small business community to better prepare them to respond to JPL solicitations, particularly in arranging for direct interface with cognizant buying and using personnel.

(3) Maintaining an awareness of and sensitivity to the program among implementing JPL personnel pursuant to P.L. 95-507. This is accomplished through program indoctrinations given to cognizant technical and Acquisition personnel.

(4) Assuring all categories of small business concerns are provided the opportunity to participate in all solicitations for products or services which they are capable of providing. The Contractor will also ensure that Indian organizations, Indian-Owned organizations, HBCU's and MI's are provided similar opportunities.

(5) Reviewing solicitations to remove statements, clauses, etc., which may unnecessarily tend to restrict or prohibit small business, small disadvantaged business and women-owned small business participation.

(6) Ensuring the establishment and maintenance of records of solicitations and subcontract award activity.

(7) Preparing and submitting periodic subcontracting reports as required to JPL Management, NASA and the Small Business Administration.

(8) Providing Acquisition and technical personnel with specialized compendiums, maintained by the Business Opportunities Office, of all categories of small business firms having capabilities of interest to JPL.

(f) Subcontract Provisions Regarding Utilization of All Categories of Small Business Concerns.

A flow-down clause entitled "Utilization of Small Business Concerns" is included in all subcontracts which offer further subcontracting opportunities. In addition, JPL requires that all subcontractors (except small business concerns) which receive subcontracts in excess of \$550,000 (\$1,000,000 for construction) submit a Small Business Subcontracting Plan, similar to this plan, which is submitted to JPL for approval prior to award of subcontract unless a subcontracting plan is not required pursuant to clause G-10(b) of the contract. Written determinations that there are no subcontracting opportunities shall be prepared by the Acquisition Division. Any questions regarding a sub-contractor's compliance with its plan will be investigated to determine whether or not the subcontractor is in compliance. The Contracting Officer may be requested to provide assistance to secure compliance of a subcontractor. The Contracting Officer may direct the Contractor to assess liquidated damages, if any, to terminate a

subcontract, or bring an action for breach of contract against said subcontractor, as appropriate, for failure to comply with a Subcontracting Plan. **(Mod 69)**

(g) All Categories of Small Business Community Interaction

The success of the JPL Small Business Enterprise Program is very dependent upon interaction with the all categories of the small business community and with business development organizations and associations. It is mainly through this interaction and exchange of information that JPL can identify and develop the widest and most effective procurement base within all categories of the small business community.

Over the past several years, JPL has developed several different areas of contact for the purpose of identifying all categories of small business capabilities and exchanging views on how to promote small business programs. We maintain close coordination with and regularly take a leadership role in the following Government and private sector organizations:

- DEPARTMENT OF DEFENSE WESTERN REGIONAL COUNCIL FOR SMALL BUSINESS EDUCATION AND ADVOCACY (formerly named: Southern California Small Business Utilization Council)

- EXECUTIVE BOARD OF THE DEPARTMENT OF DEFENSE WESTERN REGIONAL COUNCIL FOR SMALL BUSINESS EDUCATION AND ADVOCACY

- LOS ANGELES MINORITY BUSINESS OPPORTUNITY COMMITTEE (LAMBOC)

- In December 1994 JPL signed a Memorandum of Agreement with the Los Angeles Minority Business Opportunity Committee

- NATIONAL ASSOCIATION OF SMALL DISADVANTAGED BUSINESS

- SMALL BUSINESS ADMINISTRATION

Another prime source of identification of potential small disadvantaged business suppliers has been through maintaining a close and continuing contact with small disadvantaged business development organizations and associations. Over the past five years, JPL has hosted the SBA's Woman's \$s and Sense Conference.

JPL also actively participates in a number of Small Business Conferences and outreach efforts. Representative conferences attended annually include: The NASA Technology and Business Conference sponsored by NASA CTC, the Los Angeles Vendor Day Small Business Conference, Navy Gold Coast Conference, the Reservation Economic Summit and American Indian Business Trade Fair, USC Small Business Networking Event, and myriad other small business conferences sponsored by congressional representatives, government agencies, prime contractors, Chambers of Commerce and ethnic associations. JPL also participates in

networking and recognition events sponsored by these agencies and associations. For over eleven years, JPL has coordinated the Annual High-Technology Small Business Conference co-sponsored by NASA and the Small Business Administration (SBA). This conference has been very successful in providing an opportunity for all categories of small businesses to meet representatives from the Federal Government and prime contract corporations to discuss potential contracting opportunities within their agencies. Workshops are presented on a variety of current interest subjects. Between 1100 and 1600 attendees have participated annually in the conference.

In addition to the Annual High-Technology Small Business Conference, JPL has institutionalized two other outreach efforts: (1) "JPL Goes to Washington: A Space Science Symposium for Small Business" began in 1995 and held in Washington, D.C.; and (2) the "Semi-Annual Science Forum for Small Business" began in 1997 and hosted at JPL; and (3) the "Prime Contractor Round Table" begun in 1999 and held annually at JPL. The Prime Contractor Round Table/SDB Forum's main purpose is to enable JPL's major subcontractors to interact with all categories of small businesses and pursue subcontracting opportunities, specifically on JPL contracts. The forum also enables other teaming and partnering possibilities to develop between the subcontractors and all categories of small businesses on the subcontractors' other contractors. Several subcontractors and small businesses are selected by the Business Opportunities Office, based on the subcontractors' level of business with JPL and the small businesses' potential for matching the subcontractors' high tech interests. An agenda is sent out to participants. Some subcontractors are asked to participate on a panel and are given specific topics to research. The Round Table's interactive format is an excellent way to address current issues as it allows small disadvantaged businesses to interact with subcontractors on topics of mutual interest.

JPL also participates in special Small Business Briefings initiated by NASA's Administrator and coordinated with NASA Headquarters Office of Small and Disadvantaged Business Utilization.

The Contractor will participate in the NASA mentor-protégé program and will initiate discussions with NASA to that end during the first year of this contract.

AWARDS

- Award of Distinction presented by the Small Business Administration (1995).
- Certification of Appreciation presented by the Mayor of the City of Los Angeles in recognition of JPL's outstanding support and commitment to increased minority business opportunities in the Greater Los Angeles marketplace and for embracing the principles of partnership and participation (1995).
- Dwight D. Eisenhower Award for Excellence presented by the Small Business Administration to recognize large prime contractors that have excelled in their use of small business subcontractors (1995)
- NASA Group Achievement Award to the Small Disadvantaged Business Subcontracting Team in recognition of outstanding contributions to increasing

- JPL's subcontracting to small businesses and for the Laboratory far exceeding its goals (1996)
- JPL Award of Excellence - Exceptional Business Operations Excellence presented to the Manager of the Business Opportunities Office for significant achievement in exceeding JPL's small business and small disadvantaged business goals that were set by NASA for FY'96 (1997)
- Advocate of the Year Award presented to the Manager of JPL's Business Opportunities Office by the National Association of Small Disadvantaged Business (NASDB) for continued and outstanding efforts in support of minority-owned business (1997).
- CEO of the Year (1997) presented to the Laboratory Deputy Director by NASDB for his support of minority-owned businesses.
- CEO of the Year (1998) presented to the Laboratory Deputy Director by NASDB for his support of minority-owned businesses.
- NASA Recognition Award for exceeding JPL's socioeconomic goals and for outstanding support of NASA's Small Disadvantaged Business Program through exemplary outreach and advocacy activities (1996, 1997, 1999, 2000, & 2001)
- NASA New England Outreach Center's Commitment to Excellence Award (2001)

GLOSSARY

HBCU = Historically Black College or University

MI = Minority Institution

ATTACHMENT EEDUCATION PROGRAMS AND ACTIVITIES(a) Policy.

(1) Purpose. This guidance sets forth the policies, objectives, and responsibilities for the conduct of the NASA Education Program.

(2) Definition. "Education Program" for purpose of this guidance, is a generic term covering all individual NASA/JPL and NASA/JPL-sponsored programs, activities, and projects conducted for and with educators and students, in the formal and informal educational community, external to NASA.

"Formal education community," for purpose of this guidance, is a term covering individuals and institutions involved with the following educational levels: K-4, 5-8, 9-12, community college, undergraduate, graduate, and postdoctoral.

"Informal education community," for purpose of this guidance, is a term covering individuals and institutions involved with museums and science and technology centers.

(3) Program Goal. Education is now considered one of the core missions of NASA: "to inspire the next generation of explorers as only NASA can." The priorities of this mission are:

(i) Motivating K-16+ students to pursue careers in science, math, and engineering as only NASA can.

(ii) Providing educators with unique teaching tools and compelling teaching experiences as only NASA can.

(iii) Seeking to ensure that we are investing the taxpayer's resources wisely engaging minority and underrepresented students, educators, and researchers in NASA's education program.

These priorities are accomplished through implementation of a full range of NASA, NASA/JPL and NASA/JPL-sponsored education programs and activities that contribute to the various efforts and activities of those involved with and in the education community, and benefit the participants as well as advance the mission of the Agency.

The NASA/JPL Education Program demonstrates the Agency's commitment to achieving full participation of individuals and organizations from diverse populations in the science, mathematics, engineering and technology communities.

(4) Guidance. NASA is currently in the process of reorganizing its Education Program under the leadership of an Office of Education. The NASA/JPL Education Program will:

(i) align programs and activities with the stated priorities of the new education mission (see #3 above);

(ii) align with the strategic direction that is outlined by the new Office of Education; and

(iii) have clearly defined programmatic objectives and metrics; and (iv) be integrated into the Agencywide Education Program evaluation system.

(5) Education Program. Each program or activity in the NASA/JPL Education Program, is composed of three interrelated components:

(i) Customer need. NASA's education customer is defined as both the informal and formal community. The informal community includes museums and science technology centers. The formal education community is divided into the following educational levels: K-4, 5-8, 9-12, community college, undergraduate, graduate, and postdoctoral. At the K-12 level, content (knowledge) derived from the NASA Enterprises is tailored to meet customer needs and is guided by curriculum standards for mathematics, science, technology, and geography at the state and local levels. At the postsecondary level (community college, undergraduate, graduate, and postdoctoral), customers directly support or contribute to NASA mission needs.

(ii) Content. Every NASA/JPL and NASA/JPL-sponsored education program and activity is built upon the unique knowledge gained by the NASA Enterprises.

(iii) Implementation Approach. The NASA/JPL Education Program is implemented with the formal and informal education customers in alignment with the new education mission and priorities and with the strategic direction that will be outlined by the new Office of Education.

The JPL Education Implementation Plans (i.e., JPL-Wide Education Plan, OSS Solar System Exploration Education and Public Outreach Forum Plan) must support the strategic direction and leadership as set forth by the Office of Education.

(b) Responsibility.

The NASA Office of Education is responsible for Agency-wide direction, policy, and guidance for the NASA Education Program, including policy related to minority higher education institutions.

Each NASA Field Center Director will designate a single individual to serve as the Center education director to ensure close coordination with NASA's Office of Education.

JPL will do the following:

- (1) Identify an organizational entity(ies) that will serve as the functional organization for education.
 - (2) Conduct education programs and activities in accordance with established policy, procedures, and guidelines as established in this guidance.
 - (3) Implement the JPL-specific aspects of national or multi-regional programs.
 - (4) Conceive, develop, and implement local education programs and activities to meet the needs of JPL, the state, and or region, and provide support to systemic education reform efforts.
 - (5) If assigned, assume Lead responsibility for a component of the NASA Education Program, in accordance with the policy, procedures and guidelines as established in the guidance.
 - (6) Facilitate local, regional, and state education and private sector participation in the NASA Education Program.
 - (7) Ensure implementation and maintenance at the JPL level of Agency-wide and JPL-unique Education Program data collection and evaluation.
- (c) NASA Issuance.

(1) The following NASA Issuance is contractually binding and obligatory: NPD 1392.1C, Conduct of the NASA Education Program, dated December 9, 1999

DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION <i>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)</i>				1. CLEARANCE AND SAFEGUARDING a. FACILITY CLEARANCE REQUIRED <div style="text-align: center;">TOP SECRET</div> b. LEVEL OF SAFEGUARDING REQUIRED <div style="text-align: center;">TOP SECRET</div>			
2. THIS SPECIFICATION IS FOR: <i>(X and complete as applicable)</i>				3. THIS SPECIFICATION IS: <i>(X and complete as applicable)</i>			
<input checked="" type="checkbox"/>	a. PRIME CONTRACT NUMBER <div style="text-align: center;">NAS7-03001</div>			a. ORIGINAL <i>(Complete date in all cases)</i>		DATE (YYYYMMDD) <div style="text-align: center;">11/26/02</div>	
	b. SUBCONTRACT NUMBER			b. REVISED <i>(Supersedes all previous specs)</i>	REVISION NO.	DATE (YYYYMMDD)	
	c. SOLICITATION OR OTHER NUMBER	DUE DATE (YYYYMMDD)		c. FINAL <i>(Complete Item 5 in all cases)</i>		DATE (YYYYMMDD)	
4. IS THIS A FOLLOW-ON CONTRACT? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO. If Yes, complete the following: Classified material received or generated under <u>NAS7-1407</u> <i>(Preceding Contract Number)</i> is transferred to this follow-on contract.							
5. IS THIS A FINAL DD FORM 254? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. If Yes, complete the following: In response to the contractor's request dated _____, retention of the classified material is authorized for the period of _____.							
6. CONTRACTOR <i>(Include Commercial and Government Entity (CAGE) Code)</i>							
a. NAME, ADDRESS, AND ZIP CODE California Institute of Technology Jet Propulsion Laboratory 4800 Oak Grove Drive Pasadena, CA 91109			b. CAGE CODE 2D771		c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i>		
7. SUBCONTRACTOR							
a. NAME, ADDRESS, AND ZIP CODE N/A			b. CAGE CODE		c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i>		
8. ACTUAL PERFORMANCE							
a. LOCATION N/A			b. CAGE CODE		c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i>		
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT Research and Development (U)							
10. CONTRACTOR WILL REQUIRE ACCESS TO:				11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:			
	YES	NO		YES	NO		
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION	<input checked="" type="checkbox"/>		a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY			<input checked="" type="checkbox"/>	
b. RESTRICTED DATA	<input checked="" type="checkbox"/>		b. RECEIVE CLASSIFIED DOCUMENTS ONLY			<input checked="" type="checkbox"/>	
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION	<input checked="" type="checkbox"/>		c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	<input checked="" type="checkbox"/>			
d. FORMERLY RESTRICTED DATA	<input checked="" type="checkbox"/>		d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE	<input checked="" type="checkbox"/>			
e. INTELLIGENCE INFORMATION	<input checked="" type="checkbox"/>		e. PERFORM SERVICES ONLY			<input checked="" type="checkbox"/>	
(1) Sensitive Compartmented Information (SCI)	<input checked="" type="checkbox"/>		f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES	<input checked="" type="checkbox"/>			
(2) Non-SCI	<input checked="" type="checkbox"/>		g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	<input checked="" type="checkbox"/>			
f. SPECIAL ACCESS INFORMATION	<input checked="" type="checkbox"/>		h. REQUIRE A COMSEC ACCOUNT	<input checked="" type="checkbox"/>			
g. NATO INFORMATION	<input checked="" type="checkbox"/>		i. HAVE TEMPEST REQUIREMENTS	<input checked="" type="checkbox"/>			
h. FOREIGN GOVERNMENT INFORMATION	<input checked="" type="checkbox"/>		j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS	<input checked="" type="checkbox"/>			
i. LIMITED DISSEMINATION INFORMATION	<input checked="" type="checkbox"/>		k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE	<input checked="" type="checkbox"/>			
j. FOR OFFICIAL USE ONLY INFORMATION	<input checked="" type="checkbox"/>		l. OTHER <i>(Specify)</i>				
k. OTHER <i>(Specify)</i>							

12. PUBLIC RELEASE. Any information (*classified or unclassified*) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual or unless it has been approved for public release by appropriate U.S. Government authority. Proposed public releases shall be submitted for approval prior to release Direct Through (*Specify*)

Office of Public Affairs
National Aeronautics and Space Administration
Washington, DC 20546

to the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs)* for review.
*In the case of non-DoD User Agencies, requests for disclosure shall be submitted to that agency.

13. SECURITY GUIDANCE. The security classification guidance needed for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (*Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guides/extracts referenced herein. Add additional pages as needed to provide complete guidance.*)

All classified materials received or generated in connection with this contract will be handled and safeguarded in accordance with the National Industrial Security Program Operating Manual (NISPOM), DoD 5220.22-M. The highest classification level of information on this contract is Top Secret.

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. Yes No
(*If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.*)

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15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. Yes No
(*If Yes, explain and identify specific areas or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.*)

DoD projects have been established in Building 180, Room B-10 and Building 126, Room 153/154. Both areas will not be subject to inspections by the cognizant security office and any other areas developed for Special Programs.

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL Charles J. Kehoe	b. TITLE Chief of Security	c. TELEPHONE (<i>Include Area Code</i>) (818) 354-6053
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d. ADDRESS (*Include Zip Code*)
NASA Management Office-JPL
4800 Oak Grove Drive
Pasadena, CA 91109

17. REQUIRED DISTRIBUTION	
<input checked="" type="checkbox"/>	a. CONTRACTOR
<input type="checkbox"/>	b. SUBCONTRACTOR
<input checked="" type="checkbox"/>	c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
<input type="checkbox"/>	d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
<input checked="" type="checkbox"/>	e. ADMINISTRATIVE CONTRACTING OFFICER
<input checked="" type="checkbox"/>	f. OTHERS AS NECESSARY

e. SIGNATURE


Attachment "A"

SECURITY CLASSIFICATION CRITERIA FOR CONTRACT NAS7-03001

Pursuant to the Security requirements clause of the above contract, this is notification of the security classification of assigned work that will be performed and is issued to supplement the basic DoD Contract Security Classification Specification (DD Form 254).

This contract provides funds for the California Institute of Technology (the "contractor") to carry out government funded research and development work associated with the mission of NASA and elements of the Department of Defense. The research and advanced development information supporting this work may include classified information up to and including Top Secret. Therefore, the contract is regarded as being Top Secret from the security regulations point of view. Information obtained or reproduced as a result of such access shall be protected in accordance with its classification at the time of access, or as subsequently revised.

For new information being developed, security classification guidance will be provided by program classification guides, policy directives, or individual letters will provide security classification guides. For those projects dealing with areas of information for which no guidance has been provided or for which security classification cannot be determined in advance, the contractor shall prepare and activate an interim DD Form 254 for each task as required. Classification assigned shall be in accordance with the provisions of Executive Order 12958 and existing implementing guidelines. Particular attention shall be paid to those achievements which substantially advance "the state of the art" in technology of hardware development or which may have defense support applicability.

The NASA Management Office will review each tentative DD Form 254 to assure appropriate classification and uniformity of classification among programs and will modify if required. The contractor, both for in-house and otherwise controlled activities, which appear to have defense support applicability, shall expeditiously prepare and submit to the NASA Management Office an interim DD Form 254. NASA Headquarters, Code X, shall be sent a copy. No release of material on such tasks may be made until NASA Management Office approval of the DD Form 254 is obtained.



Charles J. Kehoe, Security Officer
NASA Management Office - JPL

ATTACHMENT GAGREEMENT AND CONDITIONS FOR
EVALUATION OF PROPOSALS

- (a) The recipient agrees to use proposal information for NASA evaluation purposes only. Additionally, the recipient agrees not to reveal any information concerning the proposal or the evaluation of the proposal to anyone not also participating in the evaluation. If information is disclosed to others participating in the evaluation, that disclosure shall only be to the extent that the information is required in connection with the evaluation. Although this limitation does not apply to information that has been previously made available to the public or disclosed publicly, the recipient is never to disclose what public information is contained in the proposal.
- (b) The recipient agrees that the NASA proposal cover sheet notice (FAR 15.413-2(e)), and any notice that may have been placed on the proposal by its originator, shall be applied to any reproduction or abstracts of any proposal information furnished.
- (c) Upon completion of the evaluation, the recipient agrees to return all copies of proposal information or abstracts, if any, to the NASA office that initially furnished the proposal information.
- (d) Unless authorized in writing by the NASA official releasing the proposal information, the recipient agrees not to contact either the business entities originating the proposals or any of their employees, representatives, or agents concerning any aspect of the proposal information or extracts covered by this agreement.
- (e) The recipient agrees to review his or her financial interests relative to the entities whose proposal information NASA furnishes for evaluation. This duty to review financial interests begins prior to the receipt of the proposal information and continues until the evaluation is completed and the material is sent back to NASA. At any time the recipient becomes aware that he or she or a person with a close personal relationship (household, family members, business partners, or associates) has or acquires a financial interest in the entities whose proposal information is subject to this agreement, the recipient shall immediately advise the NASA official releasing the proposal information, protect the proposal information, and cease evaluation activities pending a NASA decision resolving the conflict of interest.
- (f) For purposes of this agreement, financial interests includes, but is not limited to stock ownership, outside employment, spousal employment, profit sharing and actively negotiating for future employment.

Signature of Recipient

Date

Contract Appendix 1
NASA and Caltech Understanding Concerning the NASA
Jet Propulsion Laboratory

This contract appendix provides the historical context of the NASA/JPL relationship. This appendix is a non-binding statement with no contractual implications, and does not augment, supplement or clarify requirements set forth in the contract. Any statements contained in this appendix, including the advantages that NASA currently sees through its relationship with Caltech operating JPL as a university managed FFRDC, does not commit NASA to continuing the relationship. This appendix explains Caltech's and NASA's view on the issues covered herein, but does not commit NASA to any of the precepts set forth in the language. All statements or agreements outside of the contract (including, but not limited to past Memoranda of Understanding) are void.

Background

The foundations for the Jet Propulsion Laboratory ("JPL") were laid in the late 1930's by Professor Theodore von Karman and his graduate students of the Guggenheim Aeronautical Laboratory of the California Institute of Technology ("Caltech"). Their pioneering experiments with rocket engines initially were funded by private Caltech sources, but with the onset of World War II, objectives and sponsorships became entirely military. By 1944, a permanent organization had evolved, and Caltech formally established the "Jet Propulsion Laboratory." In the years that followed, JPL pioneered a series of advanced rocket vehicles, mostly for the Army Ordnance Corps, including Corporal and Sergeant. Finally, JPL developed Explorer I, the United States' first Earth-orbiting satellite.

On December 3, 1958, President Eisenhower transferred the responsibilities for JPL from the Army to the newly created National Aeronautics and Space Administration ("NASA"), together with the Government owned property used by JPL. A contract for research, development and related activities was entered into between NASA and Caltech. That work continues today under Contract NAS7-1407.

NASA / Caltech Relationship for Operation of the Jet Propulsion Laboratory

JPL has a dual character: it is a NASA-owned facility in Pasadena, California, as well as an operating division of Caltech staffed with regular Caltech employees. Caltech has operated JPL as a NASA Federally Funded Research and Development Center (FFRDC) since 1959 to meet certain Government research and development needs which could not be met as effectively by existing Government resources or normal contractor relationships. Contractors operating FFRDCs are allowed access beyond that which is common to the normal contractual relationship, to Government and supplier data, including sensitive and proprietary data, and to Government employees and facilities. As a part of this special relationship, it is also required that JPL be operated in the public interest with objectivity and independence, be free from organizational conflicts of interest, and have full disclosure of its affairs to NASA.

The JPL facility and the employees with their knowledge, shared experiences and traditions of excellence, are together a major national capability. Caltech and NASA each recognize a shared interest in assuring the proper use and maintenance of that national capability, not only for NASA programs but also for other programs of national interest which require the unique capabilities of JPL.

On its part, Caltech is fully committed as set forth in the Contract, as its principal mission at JPL, to carrying out NASA programs, projects and tasks assigned to JPL. In doing so, Caltech recognizes that JPL is a full member of the NASA team and, as such, must recognize and appropriately comply with those applicable laws, regulations, directives and established procedures, as are necessary to the orderly carrying out of NASA's programs and other activities. Caltech also recognizes that in addition to his responsibilities as the head of an operating division of Caltech, the Director of JPL has responsibilities to NASA similar to those of the NASA Center Directors.

It is recognized by Caltech and NASA that JPL through its connection with Caltech represents a unique educational and research resource of significance to the university community generally, and that JPL, in turn, needs close and continuing interaction with broad segments of the university community in order to carry out its mission for NASA. Accordingly, NASA encourages a high degree of interaction between the Caltech Campus and JPL at all levels, and between JPL and the university community. For its part, Caltech recognizes that it must act not only in its own interest but in the interests of the entire university community in carrying out its JPL activities, however; Caltech is still ultimately responsible to NASA for carrying out NASA programs. Caltech has a need and an obligation to facilitate the involvement of the ablest available scientists, engineers, and students from the entire university community in NASA and other Government-sponsored research and development at JPL. Caltech regards its undertaking at JPL not only as a contract, but also as a public trust.

In order to expand further the interaction between the university community and JPL, part-time participation of JPL employees in research supervision and in teaching on the Caltech Campus and with other universities is specifically encouraged by Caltech and NASA, as is the part-time work at JPL by faculty members of the Caltech Campus and other universities. Further, Caltech will make its best effort to promote additional postdoctoral research opportunities at JPL, consistent with JPL's programmatic obligations. Additionally, the part-time utilization of faculty and students at JPL will continue to be encouraged by Caltech. It is understood that these activities should not interfere with the support of NASA programs, and that NASA has the right to review JPL work in these areas for reasonableness and appropriateness.

In line with its responsibility for JPL, Caltech recognizes the continuing need for the management of an advanced technology laboratory such as JPL to have oversight and direction (that is consistent with NASA oversight and direction) from broadly experienced industrial, university, and professional leaders on scientific, technological, programmatic and general management matters. In recognition of this need, the Caltech Board of Trustees has established a JPL Committee of the Board. The Board of Trustees

of Caltech will continue to ensure that the Committee is composed of persons with relevant experience and recognized achievements in industry, universities and governmental areas. The Committee will hold regularly scheduled meetings to provide oversight and direction to Caltech/JPL on operating policy and procedures, relationships with NASA, other Federal agencies, industry, universities and the scientific community.

NASA and Caltech believe that in order to achieve the unique benefits available through the close association of JPL with Caltech, on the one hand, and to meet the JPL responsibility for major programmatic objectives, on the other hand, JPL as an institution must encompass a full spectrum of activities from basic research all the way through to the conduct and management of space flight missions. Further, JPL must be a technical “doing” organization with the fraction of total effort performed in-house highest at the research end of the spectrum of activities. To ensure a synergistic relationship with the U.S. advanced technology industry, JPL will utilize industrial capabilities to the fullest extent reasonable--consistent with the necessity that its technical management be based upon current in-depth technical understanding and first-hand implementation expertise. The necessary balance between maximum utilization of industry, on the one hand, and maintenance and development of credible technical and management skills at JPL, on the other, will be considered by NASA in program implementation decisions. Although NASA can make no commitment to the future balance of JPL directed versus competed programs, NASA’s general goal is to carry out at least one key challenging flight mission in an in-house implementation mode, and other flight systems in various system contract implementation modes appropriate to the distribution of technological inheritance within the industry and at JPL.

JPL, in developing and disseminating advanced technology, has contributed significantly to the growth and capability of U.S. advanced technology industry. Caltech and NASA are committed to the continuation of that process. Caltech, for its part, will make its best effort to interface appropriately with the private sector to facilitate and encourage the dissemination, further development and broad commercial utilization of new technology arising from JPL efforts. JPL will participate in NASA’s Technology Utilization Program to apply aerospace technology from throughout NASA to non-aerospace applications. NASA, for its part, will make its best effort to facilitate the administrative processes involved in fostering the utilization of technology by U.S. industry developed by JPL. NASA’s program to provide potential domestic users early access to NASA-developed technology having significant early commercial potential prior to general publication or export of the technology will be implemented at JPL by an early screening of NASA-sponsored work having such early commercial potential and JPL will consult with NASA on the dissemination of technical data resulting from such work.

NASA and Caltech recognize the importance of JPL to the Nation and believe that judicious efforts by JPL to identify and seek potential, appropriate work which is sponsored by agencies other than NASA, but which benefit NASA programs and makes use of JPL’s special competencies or falls within their purpose or mission is encouraged.

NASA and Caltech believe that the facilities at JPL should be at a level of quality and functional capability as is necessary to maintain JPL in the forefront of space research and development. A review of facility requirements will be conducted by JPL annually and NASA will take the results of those reviews into consideration in the annual budgetary cycles.

NASA recognizes the special character of JPL within the NASA family and the desirability of maximizing the benefits which this university-related, FFRDC can bring to NASA. In carrying out its mission JPL will adopt programmatic management policies and practices compatible with those elsewhere in the Agency and will strive to achieve the highest levels of performance, safety, and cost effectiveness. While recognizing the importance of its interface with NASA, the Laboratory will conduct its business, administrative, and personnel affairs in a manner consistent with its role as an operating division of Caltech, and it will seek to adopt the best business practices available. NASA will consider JPL's FFRDC status as a university managed FFRDC and other factors to ensure that Government policies to be applied to JPL are appropriate.