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Effective: 06/29/2011

CUSTOMER CONTRACT REQUIREMENTS International Space Station CUSTOMER CONTRACT NAS 15-10000

CUSTOMER CONTRACT REQUIREMENTS

The following customer contract requirements apply to this contract to the extent indicated below. If this contract is for the procurement of commercial items under a Government prime contract, as defined in FAR Part 2.101, see Section 3 below.

1. FAR Clauses The following contract clauses are incorporated by reference from the Federal Acquisition Regulation and apply to the extent indicated. In all of the following clauses, "Contractor" and "Offeror" mean Seller.

52.203-6 Restrictions on Subcontractor Sales to the Government (JUL 1995). This clause applies only if this contract exceeds (i) \$100,000 if included in Buyer's customer RFP or customer contract issued before October 1, 2010 or (ii) \$150,000 if included in Buyer's customer RFP issued on or after October 1, 2010, or if the prime contract was issued prior to October 1, 2010 but was amended after October 1, 2010 to increase the Simplified Acquisition Threshold

52.203-7 Anti-Kickback Procedures (JUL 1995). Buyer may withhold from sums owed Seller the amount of any kickback paid by Seller or its subcontractors at any tier if (a) the Contracting Officer so directs, or (b) the Contracting Officer has offset the amount of such kickback against money owed Buyer under the prime contract. This clause applies only if this contract exceeds \$100,000.

52.203-8 Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (JAN 1997). This clause applies to this contract if the Seller, its employees, officers, directors or agents participated personally and substantially in any part of the preparation of a proposal for this contract. The Seller shall indemnify Buyer for any and all losses suffered by the Buyer due to violations of the Act (as set forth in this clause) by Seller or its subcontractors at any tier.

52.203-10 Price or Fee Adjustment for Illegal or Improper Activity (JAN 1997).

This clause applies only if this contract exceeds (i) \$100,000 if included in Buyer's customer RFP or customer contract issued before October 1, 2010 or (ii) \$150,000 if included in Buyer's customer RFP issued on or after October 1, 2010, or if the prime contract was issued prior to October 1, 2010 but was amended after October 1, 2010 to increase the Simplified Acquisition Threshold. If the Government reduces Buyer's price or fee for violations of the Act by Seller or its subcontractors at any tier, Buyer may withhold from sums owed Seller the amount of the reduction.

52.203-11 Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions (SEP 2007).

This clause applies only if this contract exceeds (i) \$100,000 if included in Buyer's customer RFP or customer contract issued before October 1, 2010 or (ii) \$150,000 if included in Buyer's customer RFP issued on or after October 1, 2010, or if the prime contract was issued prior to October 1, 2010 but was amended after October 1, 2010 to increase the Simplified Acquisition Threshold.

52.203-12 Limitation on Payments to Influence Certain Federal Transactions (JUN 1997). This clause applies only if this Contract exceeds \$100,000. Paragraph (c)(4) is modified to read as follows: "(c)(4) Seller will promptly submit any disclosure required (with written notice to Boeing) directly to the PCO for the prime contract. Boeing will identify the cognizant Government PCO at Seller's request. Each subcontractor certification will be retained in the subcontract file of the awarding contractor.

52.204-9 Personal Identity Verification of Contractor Personnel. (JAN 2006). This clause applies only if performance under this contract requires Seller to have physical access to a Federally-controlled facility or access to a Federally-controlled information system.

52.209-6 Protecting the Government's Interests When Subcontracting With Contractors Debarred, Suspended or Proposed for Debarment (JAN 2005). Applicable clause date is revised to JUL 1995

52.211-15 Defense Priority and Allocation Requirements (SEP 1990). This clause is applicable if a priority rating is noted in this contract.

52.215-10 Price Reduction for Defective Cost or Pricing Data (OCT 1997). This clause applies only if this contract exceeds the threshold set forth in FAR 15.403-4 and is not otherwise exempt. In subparagraph (3) of paragraph (a), insert "of this contract" after "price or cost." In Paragraph (c), "Contracting Officer" shall mean "Contracting Officer or Buyer." In Paragraphs (c)(1), (c)(1)(ii), and (c)(2)(i), "Contracting Officer" shall mean "Contracting Officer or Buyer." In Subparagraph (c)(2)(i)(A), delete "to the Contracting Officer." In Subparagraph (c)(2)(ii)(B), "Government" shall mean "Government or Buyer." In Paragraph (d), "United States" shall mean "United States or Buyer."

52.215-12 Subcontractor Cost or Pricing Data (OCT 1997). This clause applies only if this contract exceeds the threshold set forth in FAR 15.403-4 and is not otherwise exempt. The certificate required by paragraph (b) of the referenced clause shall be modified as follows: delete "to the Contracting Officer or the Contracting Officer's representative" and substitute in lieu thereof "to The Boeing Company or The Boeing Company's representative (including data submitted, when applicable, to an authorized representative of the U.S. Government)."

52.215-14 Integrity of Unit Prices (OCT 1997).

This clause applies only if this contract exceeds (i) \$100,000 if included in Buyer's customer RFP or customer contract issued before October 1, 2010 or (ii) \$150,000 if included in Buyer's customer RFP issued on or after October 1, 2010, or if the prime contract was issued prior to October 1, 2010 but was amended after October 1, 2010 to increase the Simplified Acquisition Threshold. This clause does not apply to construction or architect-engineer services under FAR Part 36; utility services under FAR Part 41; services where supplies are not required; commercial items; and petroleum products.

52.215-15 Pension Adjustments and Asset Reversions (DEC 1998). This Clause applies to this contract if it meets the requirements of FAR 15.408(g).

52.215-18 Reversion or Adjustment of Plans for Postretirement Benefits Other Than Pensions (PRB) (OCT 1997). This Clause applies to this contract if it meets the requirements of FAR 15.408(j).

52.215-19 Notification of Ownership Changes (OCT 1997). This Clause applies to this contract if it meets the requirements of FAR 15.408(k).

52.215-21 Requirement for Cost or Pricing Data or Information Other Than Cost and Pricing Data - Modifications (OCT 1997). This clause applies only if this contract exceeds the threshold set forth in FAR 15.403-4. The term "Contracting Officer" shall mean Buyer.

52.219-8 Utilization of Small Business Concerns (OCT 2000).

52.219-9 Small Business Subcontracting Plan (JAN 2002). This clause applies only if this contract exceeds \$500,000 and Seller is not a small business concern. Seller shall adopt a subcontracting plan that complies with the requirements of this clause. In addition, Seller shall submit to Buyer Form X31162, Small and Small Disadvantaged Business and Women-Owned Small Business Subcontracting Plan Certificate of Compliance.

52.222-1 Notice to the Government of Labor Disputes (FEB 1997). Contracting Officer shall mean Buyer.

52.222-21 Prohibition of Segregated Facilities (FEB 1999).

52.222-26 Equal Opportunity (APR 2002).

52.222-35 Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (DEC 2001). This clause applies only if this contract exceeds \$25,000.

52.222-36 Affirmative Action For Workers With Disabilities (JUN 1998). This clause applies only if this contract exceeds \$ 10.000.

52.222-37 Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other EligibleVeterans (DEC 2001). This clause applies only if this contract exceeds \$25,000.

52.223-3 Hazardous Material Identification and Material Safety Data (NOV 1991). This clause applies only if Seller delivers hazardous material under this contract. Alternate I (NOV 1991).

52.225-8 Duty-Free Entry (FEB 2000). This clause applies only if this contract identifies supplies to be afforded duty-free entry or if foreign supplies in excess of \$10,000 may be imported into the customs territory of the United States. For the purposes of this clause, the blanks in paragraph (g)(3) are completed as follows: UNITED STATES GOVERNMENT, DEPARTMENT OF DEFENSE, Duty-free entry is claimed pursuant Section XXII, Chapter 98, Subchapter VIII, Item No. 9808.00.30 of the Harmonized Tariff Schedule of the United States. Upon arrival of shipment at port of entry, the importer or authorized agent will notify Commander, Defense Contract Management Area Operations (DCMAO, New York, 201 Varick Street, New York, New York, 10014-4811, Attention DCRN-NCT) for execution of Customs Forms 7501, 7501-A, or 7506 and required duty free entry certificates.

52.225-13 Restrictions on Certain Foreign Purchases (OCT 2003).

52.227-1 Authorization and Consent (JUL 1995).

52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement (AUG 1996). A copy of each notice sent to the Government will be sent to Buyer. "Contracting Officer" shall mean "Buyer". This clause applies only if this contract exceeds \$100,000.

52.227-14 Rights in Data--General Alternate II (JUN 1987). As modified by 1852.227-14 NASA FAR Supplement (OCT 1995).

52.227-14 Rights in Data--General Alternate III (DEC 2007).

This clause applies only if data, as defined in paragraph (a) of the clause, will be produced, furnished, or acquired under this contract. As modified by 1852.227-14 NASA FAR Supplement (OCT 1995).

52.227-14 Rights in Data--General (JUN 1987). As modified by 1852.227-14 NASA FAR Supplement (OCT 1995). This clause applies only if data will be produced, furnished or acquired under this contract.

52.227-14 (Alternate V) (JUN 1987) As modified by 1852.227-14 NASA FAR Supplement (OCT 1995).

52.227-14 (JUN 1997) As modified by 1852.227-14 NASA FAR Supplement (OCT 1995)

52.227-16 Additional Data Requirements (JUN 1987). This clause applies only if this contract involves experimental, developmental, research, or demonstration work.

52.230-6 Administration of Cost Accounting Standards (NOV 1999). Add "Buyer and the" before "Contracting Officer" in paragraph (f). This provision applies if clause H001, H002, or H004 is included in this contract.

52.237-2 Protection of Government Buildings, Equipment, and Vegetation (APR 1984). This clause applies only if work will be performed on a Government installation. "Contracting Officer" shall mean Buyer.

- **52.242-15 Stop-Work Order** (AUG 1989). Change "90 days" and "30 days" to "100 days" and "20 days" respectively. The terms "Contracting Officer" and "Government" shall mean Buyer.
- 52.244-5 Competition in Subcontracting (DEC 1996).
- 52.244-6 Subcontracts for Commercial Items (AUG 2009).
- **52.245-18** S pecial Test Equipment (FEB 1993). Change "30 days" to "45 days" in paragraph (b) and (c). The notice of intent to procure special test equipment required by this clause shall be forwarded to the Buyer.
- 52.246-11 Higher-Level Contract Quality Requirement (FEB 1999).
- **52.247-63 Preference for U.S.-Flag Air Carriers** (JAN 1997). This clause applies only if this contract involves international air transportation.
- **52.247-64 Preference for Privately Owned U.S.-Flag Commercial Vessels** (JUN 2000). In paragraph (c)(2) "20" and "30" are changed to 10 and 20 respectively.
- 52.247-67 Submission of Commercial Transportation Bills to the General Services Administration for Audit (JUN 1997).
- **52.248-1 Value Engineering** (FEB 2000). The term "Contracting Officer" means Buyer. This clause applies only if this contract is for \$100,000 or more. If Value Engineering Change Proposal is accepted by the Government, Seller's share will be 50% of the instant, concurrent and future contract net acquisition savings and collateral savings that Buyer receives from the Government. Seller's negotiated share of the net acquisition savings and collateral savings shall not reduce the Government's share of concurrent or future savings or collateral savings. Buyer's payments to Seller under this clause are conditioned upon Buyer's receipt of authorization for such payments from the Government.
- **2. NASA FAR Supplement Clauses** NASA Contracts. The following contract clauses are incorporated by reference from the National Aeronautics and Space Administration Federal Acquisition Regulation Supplement and apply to the extent indicated. In all of the following clauses, "Contractor" means Seller.
 - **1852.204-76** Security Requirements for Unclassified Information Technology Resources (JUL 2001). This clause applies to all or any part of this contract that includes information technology resources or services in which Seller must have physical or electronic access to NASA's sensitive information contained in unclassified systems that directly support the mission of the Agency. Applicable clause date is revised to JUL 2002.
 - 1852.208-81 Restrictions on Printing and Duplicating (NOV 2004). Applicable clause date is revised to OCT 2001
 - **1852.219-74** Use of Rural Area Small Businesses (SEP 1990). This clause applies only if this contract offers subcontracting possibilities.
 - **1852.219-75 Small Business Subcontracting Reporting** (MAY 1999). This clause applies if FAR 52.219-9 is included in this contract.
 - 1852.219-76 NAS A 8 Percent Goal (JUL 1997). This clause applies only if Seller is not a small business.
 - **1852.223-70** Safety and Health Plan (APR 2002).
 - **1852.223-72 Safety and Health (Short Form)** (APR 2002). This clause applies only if this contract exceeds \$3,000. Applicable clause is revised to DEVIATION (DEC 1988).

1852.223-74 Drug-and Alcohol-Free Workforce (MAR 1996). This clause applies to Seller if work is performed by an employee in a sensitive position, except if this contract is for commercial items.

1852.225-70 Export Licenses Basic (FEB 2000), Alternate I (FEB 2000).

1852.227-86 Commercial Computer Software--Licensing (DEC 1987). This clause applies only if Seller's software will be delivered to NASA under licensing.

1852.228-72 Cross-Waiver of Liability for Space Shuttle Services (SEP 1993).

1852.228-76 Cross-Waiver of Liability for Space Station Activities (DEC 1994).

1852.237-72 Access to Sensitive Information (JUN 2005).

1852.237-73 Release of Sensitive Information (JUN 2005). This clause applies only if Seller may be required to furnish sensitive information in performance of this contract. Throughout the referenced clause, "this proposal" means Seller's proposal, and "this contract" means the contract between Buyer and Seller.

1852.242-72 Observance of Legal Holidays (AUG 1992). This clause applies only if this contract requires work on a Government installation.

1852.244-70 Geographic Participation in the Aerospace Program (APR 1985). This clause applies only if this contract is for \$100.000 or more.

1852.246-73 Human Space Flight Item (MAR 1997).

3. Commercial Items If goods or services being procured under this contract are commercial items and Clause H203 is set forth in the purchase order, the foregoing Government clauses in Sections 1 and 2 above are deleted and the following FAR/DFARS clauses are inserted in lieu thereof:

52.203-15 Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (MAR 2009).

52.219-8 Utilization of Small Business Concerns (OCT 2000). Include in all subcontracts that offer further subcontracting opportunities. If a subcontract (except subcontracts to small business concerns) exceeds \$500,000 (\$1,000,000 for construction of any public facility), Seller and any lower tier subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

52.222-26 Equal Opportunity (subparagraph (b)(1) through (11)) (APR 2002).

52.222-35 Affirmative Action for Special Disabled and Vietnam Era Veterans (DEC 2001). This clause applies only if this contract exceeds \$25,000.

52.222-36 Affirmative Action For Workers With Disabilities (JUN 1998). This clause applies only if this contract exceeds \$ 10,000.

52.247-64 Preference for Privately Owned U.S.-Flag Commercial Vessels (JUN 2000). In paragraph (C)(2), "20" and "30" are changed to "10" and "20", respectively.

4. Cost Accounting Standards

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52.230-2 Cost Accounting Standards (APR 1998). (1) (Applicable if this contract incorporates clause H001). The version of FAR 52.230-2, Cost Accounting Standards, incorporated by clause H001 is the version dated April 1998.

5. Prime Contract Special Provisions The following prime contract special provisions apply to this purchase order

H.4 TECHNICAL INFORMATION RELEASES AND PUBLICATIONS

As authorized by paragraph (d)(1) of the Rights in Data -General Clause of this contract, the following exception shall apply:

During the performance of this contract, if data relating to this contract is planned for use in oral or written presentations, professional meetings, seminars, or in articles to be published in professional, scientific, and technical journals and similar media, the Contractor shall assure that an advance information copy of the presentation or article is sent to the Space Station Program (SSPO) to have the benefit of advance information concerning accomplishments of interest, and will provide the SSPO an opportunity to make suggestions to the Contractor concerning revisions if it is considered that such comments might be useful to the Contractor to help assure the technical accuracy of the information to be presented or published. The information copy will be forwarded to the technical monitor of the contract at least four weeks in advance of the date the author intends to give the presentation or submit the article for publication.

The advance information copy may be submitted in the format or medium which will be utilized in its ultimate release.

1. The Government has entered into agreements with International Partners (IP) which contemplates that certain space station "common items," previously intended to be procured by NASA, will now be acquired directly by the contractors of these organizations from the United States development contractor. These agreements provide, among other things, that NASA will take the necessary contractual steps to enable that common items can be procured by International Partner contractors for Space Station use, and to ensure that the recurring cost to such contractors consistent with the cost basis paid by NASA.

In order to carry out the intent of the above, the contractor (Boeing) agrees as follows:

- (a) If a Product Group is requested by an IP contractor to submit a proposal for any item being supplied under this contract, Seller agrees to estimate such items to such contractor consistent with the unit price or recurring costs estimated for such items in this contract; provided, however, that if there are differences in the circumstances under which the items are being priced to the contractor (e.g., greater or lessor quantities, configuration changes, alternative business relationships, variances in schedule requirements, break in production, actual price experience, etc.), Seller's estimate of the items may vary to the extent of such different circumstances.
- (b) Each proposal provided to an IP contractor shall include a reference to the unit price or recurring costs estimated for such items in this contract as well as an explanation of any differences.
- (c) Seller agrees to negotiate in good faith with any IP contractors desiring to buy items supplied under this contract, and to do so in a manner consistent with the terms of this clause.

H.39 JS C HAZARDOUS MATERIALS USE (JS C 52.223-92) (DEC 1999)

- (a) This clause is JSC-unique, and the requirements are in addition to any U.S. Environmental Protection Agency, U.S. Occupational Safety and Health Administration, or other state or Federal regulation or statute. Therefore, the following requirements do NOT supercede any statutory or regulatory requirements for any entity subject to this clause.
- (b) "Hazardous materials," for the purposes of this clause, consist of the following:
- (1) Those materials defined as "highly hazardous chemicals" in Occupational Safety and Health Administration Process Safety Management Regulation, 29 Code of Federal Regulation

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1010.119, without regard for quantity.

- (2) Those "extremely hazardous substances" subject to the emergency planning requirements in the Environmental Protection Agency Emergency Planning and Community Right-to-Know Regulation, 40 Code of Federal Regulation 355, Part 355, without regard for quantity.
- (3) Those "hazardous substances" subject to the release notification requirements under Environmental Protection Agency's Emergency Planning and Community Right-to-Know Regulation, 40 Code of Federal Regulation 302.4, without regard for quantity.
- (4) Any radioisotope material or device that produces ionizing radiation.
- (5) Any Class II, III, or IV laser as defined by the American National Standards Institute No. Z136.1 (1986)
- (6) Any explosive or any pyrotechnics.
- (7) Any pesticide.
- (c) The contractor shall develop and maintain an inventory listing the identity and quantity of hazardous materials stored or used onsite at JSC for the performance of the contract.
- (d) The contractor shall ensure that the proper training of its employees in the use and inherent hazards of these materials is accomplished prior to use.
- (e) The contractor shall notify the JSC Occupational Health and Test Support Office (SD13) prior to any initial use or different application of these materials.
- (f) The contractor shall use all hazardous materials properly and take all necessary precautions to ensure no harm is done to humans or the environment.
- (g) The contractor shall insert the substance of this clause, including this Paragraph F with appropriate changes of designations of the parties, in subcontracts under which hazardous materials will be utilized, or may reasonably be expected to be utilized, onsite at JSC.
- (h) In the event the contractor fails or refuses to comply with any aspect of this clause, such failure or refusal may be considered a material breach of this contract.

In addition to any other requirements of this contract, all individuals, contractors or subcontractors who perform tasks as a system administrator or have authority

to perform tasks normally performed by system administrator shall be required to demonstrate knowledge appropriate to those tasks. This demonstration, referred to as the NASA System Administrator Security Certification, is a NASA funded two-tier assessment to verify that system administrators are able to –

- 1. Demonstrate knowledge in system administration for the operating systems for which they have responsibility.
- 2. Demonstrate knowledge in the understanding and application of Network and Internet Security.

Certification is granted upon achieving a score above the certification level on both an Operating System test and the Network and Internet Security Test. The Certification earned under this process will be valid for three years. The NASA Chief Information Officer has established the criteria for this skills assessment..

The objectives and procedures for this certification can be obtained by contacting the IT Security Awareness and Training Center at (216) 433-2063.

System administrators are those who provide IT services, network services, files storage, web services, etc. to persons otherelse other than themselves and take or assume the responsibility for the security and administrative controls of such services or machines. Lead system administrators have responsibility for information technology security (ITS) for multiple computers or network devices represented within a system; ensuring all devices assigned to them are kept in a secure configuration (patched/mitigated); and ensuring that all other system administrators under their lead understand and perform ITS duties. Individuals that have full access or arbitrative rights on a system or machine that is only servicing themselves does not constitute a "system administrator" since they are only providing or accepting responsibility for their system. Individuals only servicing themselves is not required to obtain a System Administrator Certification.

- (a) "Data" for purposes of this clause, means recorded information, regardless of the form or media on which it may be recorded by Boeing or its subcontractors. The term includes technical data; computer software; and information incidental to contract performance. Types of data contained in the definition also include the results of contractor internal audits of any discipline, procedures, system, or task which directly or indirectly supports the performance of this contract as well as data from any audit of subcontractor(s) performing under this contract. The term is limited to data that is archived as a normal part of contractor performance.
- (b) The Contracting Officer or designee shall, through closeout, have access to and the right to examine any of the data produced or specifically used in the performance of this contract. The purpose of this access provision is to permit sampling of contractor data to verify requirements compliance and continuous improvement without unduly increasing the number of data deliverables to this contract.
- (c) The Contractor shall make available at all reasonable times for Government inspection the most current data produced or used in the performance of this contract for examination
- (d) Notwithstanding the Additional Data Requirements clause, the Government shall have the right to reproduce any data found during the examination that it wishes to retain. The Government will reimburse reproduction costs only when it uses Contractor equipment for the reproduction. The Government shall retain no greater rights in the reproduced data than it would have under the Rights in Data--General clause.
- (e) The Contractor shall flow this clause to all cost-type subcontracts valued at \$1,000,000 or more.

H.44 GOVERNMENT INSIGHT

(a) Definitions. For the purpose of this contract, the following definitions apply:

"Insight," as used in this clause, means technical visibility into the Program, maintained through audit, surveillance, assessment of trends and metrics, software independent verification and validation, the flight readiness review process, and review or independent assessment of out-of-family anomalies occurring in any phase of the program.

"Surveillance," as used in this clause means continual monitoring and verification of the status of manufacturing, testing, and processing of Station hardware, software and operations preparations to ensure that requirements are being fulfilled. Items to be monitored and verified are selected—this is not an all inclusive activity.

"Audit," as used in this clause, means the implementation of procedures and requirements of the NASA Engineering Quality Audit (NEQA) or other equivalent audit techniques used to perform periodic audit of all aspects of processes and procedures required to manufacture, assemble, test, and process hardware for flight. Audits may include an examination of all disciplines and tasks which are involved with or support Shuttle launch and landing operations, hardware and software production and maintenance, safety and quality assurance, logistics, procurements and operations. These descriptions are illustrative only and shall not be construed as any limitation on the Government's right to conduct an audit of the Contractor and subcontractors to determine performance on this contract.

- (b) The Government shall have the right to audit the Contractor and cost-reimbursement subcontractors (with values exceeding \$1 million) to determine compliance with the requirements of this contract. One purpose of these audits is to afford the Government insight into and understanding of Contractor and selected subcontractor processes and procedures to determine whether the processes or procedures (1) adversely affect safety; (2) are not within contract performance standards; or (3) adversely affect future launch schedules.
- (c) The Government may schedule fact-finding meetings with the Contractor and subcontractors as necessary to discuss issues requiring Government insight.

 Scheduling and format of these meetings shall indicate whether exchange of information will be required, and the number and expertise of Contractor/subcontractor personnel who shall attend the meetings. When requested by the Contracting Officer or designee, the Contractor and subcontractors shall provide necessary support to the Government when it audits the Contractor or subcontractor and for the Government-Contractor/subcontractor meetings. The purpose of these meetings is to understand the findings of the Government audits. The parties understand and agree that no direction from the Government or constructive change to the contract shall result from any of these meetings.

H.46 GOVERNMENT-PROVIDED RUSSIAN LANGUAGE AND LOGISTICS SERVICES (RLLS)

The contractor is authorized use of the following RLLS in performance of this contract or any subcontract entered into under this contract:

- 1. Russian Translations
- 2. Russian Interpretations
- 3. Russian Language training
- 4. Russian Logistics services (both in the U.S. and in Russia), including a) Ground Services (e.g. airport pickup/drop-off, transportation between hotels and meeting locations); b) Meeting Services (e.g. coordination of schedules, agendas, and protocols); c) Hotel Reservations at the Renaissance Hotel Olympic Penta in Russia; and d) Visa Coordination.

The Contracting Officer shall be promptly notified by the contractor upon identification of a need for RLLS. The Contracting Officer shall provide instructions as to the point of contact for submitting a request for RLLS. Failure of the Government to provide adequate

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or timely RLLS shall entitle the contractor to an equitable adjustment in all affected contract terms and conditions, exclusive of any adjustment to fee. This provision, including this flow-down requirement, shall be inserted in all subcontracts where it is anticipated that RLLS may be necessary for contract performance.

H.47 ADDITIONAL Export Control REQUIREMENTS

In addition to the requirements set forth in NFS 1852.225-70 EXPORT LICENSES, the contractor shall perform the following tasks when they facilitate exports of NASA hardware, software or technical data according to the Export Administration Regulations, International Traffic in Arms Regulations or any other U.S. export control regulations (e.g. Nuclear Regulatory Commission, Drug Enforcement Agency etc.) pursuant to this contract:

- 1. Provide to the Johnson Space Center (JSC) Export Services Team (EST), in writing, an "Advanced Notification of Export" (ANE) for all program related exports (hardware, software and technical data) where NASA is considered the "U.S. Principal Party in Interest" (USPPI)". The requirements below shall be met by the contractor and its subcontractors, respectively, when accomplishing the following activities:
- a. Submitting requests for NASA to apply for an export license with the Department of Commerce or Department of State for use under the contract activity in support of the International Space Station Program.
- b. Submitting notice of the contractor's intent to use Department of Commerce or Department of State export licenses obtained by NASA as they apply to the contract activity in support of the International Space Station Program.
- c. Submitting notice of the contractor's intent to use any export license exceptions or exemptions as they apply to the contract activity in support of the International Space Station Program.
- 2. For all program related exports (hardware, software or technical data), submit the equivalent information described below to the Center Export Administrator (CEA) at the geographically closest NASA Space Flight Center (JSC, Marshall Space Flight Center (MSFC) or Kennedy Space Center (KSC)) according to the policies and procedures of that center (check with the cognizant Contracting Officer or CEA). A courtesy copy of equivalent information submitted to MSFC or KSC shall be provided to the JSC CEA's office. Provide copies of shipping documents for shipments made under a NASA Export License, exemption or exception to the appropriate CEA within two weeks after the shipment.
- a. The contractor shall submit requests for NASA to apply for a license at least 7 months prior to the need date to export. Note that the agencies, which approve the licenses, can take up to 6 months or more to process them.
- b. The contractor shall submit an ANE in a formal letter, fax or e-mail (e-mail is preferred), containing the information described below (as applicable), addressed to the CEA's Office in accordance with the submission schedule below. The schedule provides a minimum amount of time required to process the information, however license requests may take longer than 6 months to process by the controlling agency.

Required Information	License Application	Use of License	Use Exemption/Exception
Submission Schedule	7 months prior to need date		At least 30 days prior to planned export date
Description of Commodity	X	X	X
(as it appears on the license)			
Specific End Use	X		X
1) NASA license number (include date of expiration), International Traffic in Arms Regulation (ITAR) license exemption (e.g. 125.4(b)(3)) or Export Administration Regulation (EAR) exception (e.g. GOV, RPL, TMP, ENC, etc.). *		X	X
2) Quantity and description as it appears on the applicable license.	X	X	X
3) Date of planned export	X	X	X
4) Origin of export (Company and city).	X	X	X
5) Intermediate and Ultimate Consignees, End User (full name and address), and Destination of export (Country, city and company).	X		
6) Point of contact with current phone number and e-mail address (for technical questions – must be a representative of the contractor originating the export).	X	X	X
7) Contractor Point of contact, current e-mail address and phone number for CEA's use to send response	X	X	X
8) Export Classification Control Number (ECCN) under the Export Administration Regulations or category under the United Sates Munitions List regulations	X		X
9) The technical rationale used to support the classification	X		X

10) Requirement to export (i.e., MOU, contract number, meeting minutes). Upon request by the CEA or CO, the contractor shall provide a copy of the requirement within 3 working days	X		X
11) Additional information as necessary to clarify the export	X	X	X
12) A copy of the completed Pro Forma Invoice (JS C Form 1735) or equivalent form/ document attached to an email if prepared for the export	X	X	X
13) A copy of the completed electronically signed JSC Form 1724 (Export Control Request and Approval Worksheet) or equivalent form	X Signed by Civil Servant -Export Rep	X Copy of Signed form	X Signed by Civil Servant - Export Rep
NASA Point of Contact	X		X
S pecific End Use	X	X	X

^{*} Additional information is required for these exceptions.

- i. If using RPL, provide the license number, or copy of records confirming export authorization for the item being replaced.
- ii. If using ENC, provide reference to the manufacturer's record verifying eligibility for ENC (e.g. full internet address (URL), e-mail from manufacturer or copy of Commerce Department communication to manufacturer.
 - iii. If using TMP, provide the expected return date.) **
- c. After all the information is submitted, the cognizant CEA's office will respond to the contractor or its subcontractor with a status within ten (10) working days. It is the CEA's goal to provide a notice of approval or other disposition within 10 working days for "Use of License" and "Use of Exemption/Exception" to the contractor or its subcontractors who are exporting on behalf of NASA. Once approved, NASA will provide the destination control statement to use on all export documentation via e-mail or hardcopy letter.
- 3. In addition to other applicable export exemptions, the contractor or its subcontractors are authorized to export hardware, software or data to ISS International Partner (IP) governmental offices that meet the conditions of license exception GOV (15 CFR 740.11(b)(2)(iii)(A)).
- 4. ** For temporary exports (TMP), the contractor or its subcontractors shipping on behalf of NASA shall submit written notice to the CEA and CO within five (5) business days of the date that the item was actually returned, along with the incoming documentation.
- 5. The contractor or its subcontractors shall keep those records required by Department of Commerce and Department of State regulations for all exports and make them available upon request to NASA and its representatives
- 6. These requirements do not apply to contractor or subcontractor commercial contract related exports or exports pursuant to Technical Assistance Agreements or other license authorizations received by the contractor or its subcontractors and for which the contractor or its subcontractors will be the USPPI and/or "exporter of record".
- 7. These requirements do not apply to exports for which there is "No License Required" (e.g. EAR99, 9A004 to Canadian

International Partners on ISS, etc.)

- 8. The contractor and its subcontractors shall report to the NASA JSC EST, in writing, any potential export issues (including those related to support of sustaining engineering and operations of ISS) that cannot be resolved by the contractor or its subcontractors, respectively. Such report and/or notification of issues and technical tasks should be reported to the NASA JSC EST at least three (3) months in advance of requested action.
- 9. Upon discovery of unforeseen adverse export issues, the contractor shall immediately notify NASA JSC EST by telephone with a follow up e-mail or hardcopy letter of said issue and shall report to the NASA JSC EST, in writing, as the facts become known.
- 10. This clause applies when the contractor or its subcontractors elect to export NASA owned Government Furnished Equipment and Property (GFE, GFP) (including data, software or hardware). In such instances, the contractor or its subcontractors are the USPPI. They shall provide verifiable evidence that a valid export license, exemption or exception has been processed and approved (as applicable). They shall also provide this information for additional property that is not GFE or GFP that the contractor or its subcontractors elect to include with the GFE and GFP.

H.48 SUBCONTRACTING WITH RUSSIAN ENTITIES FOR GOODS OR SERVICES

- (a) Definitions: In this provision:
- i) The term "Russian entities" includes the following:
- (1) The Russian Federal Space Agency (Roscosmos),
- (2) Any organization or entity under the jurisdiction or control of Roscosmos, or
- (3) Any other organization, entity, or element of the Government of the Russian Federation.
- ii) The term "Organization or entity under the jurisdiction or control of Roscosmos" means an organization or entity that:
- (1) Was made part of the Russian Federal Space Agency upon its establishment on February 25, 1992;
- (2) Was transferred to the Russian Federal Space Agency by decree of the Russian Government on July 25, 1994, or May 12, 1998;
- (3) Was or is transferred to the Russian Aviation and Space Agency or Russian Federal Space Agency by decree of the Russian Government at any other time before, on, or after March 14, 2000; or
- (4) Is a joint stock company in which the Russian Aviation and Space Agency or Russian Federal Space Agency has at any time held controlling interest.
- iii) The term "extraordinary payments" means payments in cash or in kind made or to be made by the United States Government prior to January 1, 2012, for work to be performed or services to be rendered prior to that date necessary to meet United States obligations under the Agreement Concerning Cooperation on the Civil International Space Station, with annex, signed at Washington January 29, 1998, and entered into force March 27, 2001, or any protocol, agreement, memorandum of understanding, or contract related thereto.
- (b) This clause implements the Iran and Syria Nonproliferation Act (the Iran Nonproliferation Act as amended by the Iran Nonproliferation Amendments Act of 2005) to allow extraordinary payments prior to January 1, 2012 to Russian entities in connection with the International Space Station. NASA has applied the restrictions in the Act to include funding of Russian entities via U.S. contractors.
- (c)(i) The Contractor shall not subcontract with Russian entities without first receiving written approval from the Contracting Officer. Any costs incurred under subcontracts with Russian entities shall be deemed an unallowable cost unless the contractor or subcontractor has obtained prior written approval from the Contracting Officer to enter into such subcontracts. In order to obtain this written approval to subcontract with any Russian entity as defined in paragraph (a), the Contractor shall provide the Contracting Officer with the following information related to each planned new subcontract and any change to an existing subcontract with entities that fit the description in paragraph (a):
- (1) A detailed description of the subcontracting entity, including its name, address, and a point of contact, as well as a detailed description of the proposed subcontract including the specific purpose of payments that will made under the subcontract.

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(2) The contractor shall provide certification that the subcontracting entity is not on any of the denied parties, specially designated nationals and entities of concern lists found at: http://www.hq.nasa.gov/office/oer/nasaecp/Welcome.html as of the date of the subcontract approval request.

NAS15-10000 MOD 1355 (S/A)

Denied Parties, Specially Designated Nationals and Entities of Concern

BIS's Listing of Entities of Concern
BIS's List of Denied Parties
Debarred Parties Listing
OFAC's List of Specially Designated Nationals (Adobe PDF format)
List of Unverified Persons in Foreign Countries
http://www.state.gov/t/isn/c15231.htm

- (ii) Unless relief is granted by the Contracting Officer, the information necessary to obtain approval to subcontract shall be provided to the Contracting Officer 30 business days prior to executing any planned subcontract with entities defined in paragraph (a).
- (d) After receiving approval to subcontract, the contractor shall provide the Contracting Officer with a report every six-months which documents the individual extraordinary payments made to an entity in paragraph (a). The reports are due on July 15th and January 15th. The July 15th report should document all of the individual extraordinary payments made from the previous January through June. The January 15th report should document all of the individual extraordinary payments made from the previous July through December. The content of the report shall provide the following information for each time an extraordinary payment is made to an entity in paragraph (a):
- (i) The name of the entity
- (ii) The subcontract number
- (iii) The amount of the payment
- (iv) The date of the payment
- (e) The Contracting Officer may direct the Contractor to provide additional general information for any other prospective or existing subcontract at any tier. The Contractor is not responsible for performing independent audits or business reviews of a proposed entity for the purposes of compliance with this clause. The Contracting Officer may direct the Contractor to terminate for the convenience of the government any subcontract at any tier with an entity described in paragraphs (a), and such action may be subject to an equitable adjustment.
- (f) Notwithstanding FAR 52.216-7, "Allowable Cost and Payments," on or after January 1, 2012 the contractor shall be responsible to make payments to entities defined in paragraphs (a) of this provision. Any subcontract with entities defined in paragraph (a), therefore, should be completed in sufficient time to permit the U.S. Government to make extraordinary payments on subcontracts with Russian entities on or before December 31, 2011.
- (g) The Contractor shall include the substance of this clause in all its subcontracts, and shall require such inclusion in all other subcontracts of any tier. The Contractor shall be responsible to obtain written approval from the Contracting Officer to enter into any lower tier subcontract that involves entities defined in paragraph (a).

HUMAN SPACE FLIGHT ITEM (NFS 1852.246-73) (MARCH 1997)

The following statement applies to the Contractor and shall be included in all subcontracts and purchase orders placed by it in support of this contract, without exception as to amount or subcontract level:

WORKMANSHIP OF HIGHEST QUALITY STANDARDS ARE ESSENTIAL TO ASTRONAUT SAFETY. IF YOU ARE ABLE TO SUPPLY THE DESIRED ITEM WITH A HIGHER QUALITY THAN THAT OF THE ITEMS SPECIFIED OR PROPOSED, YOU ARE REQUESTED TO BRING THIS FACT TO THE IMMEDIATE ATTENTION OF THE PURCHASER."

Packaging, Handling, Storage and Transportation of Flight Hardware. This

clause only applies to flight hardware. This clause does not apply to commercial items or commercial components, as those terms are defined at FAR 52.202-1, unless they have undergone modifications, screenings or tests that are unique to items sold to NASA. In the event of a direct conflict between this clause and a Statement of Work or Supplier Data Requirements List requirement, the Statement of Work or Supplier Data Requirements List requirement shall govern. 1. Seller shall identify all special handling requirements associated with hardware, firmware, materials, devices, items, goods, and articles classified as flight hardware (or any similar designation of use in space or use on orbit, such as "ITEMS FOR SPACE FLIGHT USE") (hereinafter referred to as "Flight Items" or "Flight Hardware") purchased or leased on this contract. This identification shall be made on both the shipping document (or as an attachment to the shipping document) and on correlating packaging labels, placards, or large legible printed markings on the exterior of the packaging itself, designed to alert those handling, transporting, shipping, receiving, moving, stacking, un-stacking, storing or processing (hereinafter referred to as "Handling") the Flight Items after the Flight Items leave Seller's facility. If Seller does not have labels that meet the intent of this clause, Buyer will supply the required labels. Special handling requirements include, but are not limited to, the following considerations:

- (a) Special handling instructions (where necessary to prevent damage or deterioration) such as hardware specific packaging/handling documentation or instructions to fork lift operators on how to lift the Flight Item without damaging the Flight Item, "Do not drop", or "this end up" arrows.
- (b) Electrostatic discharge (ESD) sensitive item warnings, for example, "Flight hardware; Electrostatic Discharge Sensitive (ESDS), handle IAW MILSTD-1686" or "EEE Part(s); ESDS Device; EMI shielding required".
- (c) Temperature range limitations (where the item could be damaged if exposed to temperatures between minus 25 degrees Fahrenheit (F) and 125 degrees F during transportation or between 68 degrees F and 82 degrees F during storage).
- (d) Humidity range limitations (where the item could be damaged if exposed to humidity greater than 70% relative humidity (RH)).
- (e) Fragile item warnings (where the item is fragile or requires shock recorders or indicators during handling).
- (f) Minimum or maximum bend radius or radii limitations (where a flexible Flight Item could be damaged if excessively bent or folded while being handled).
- (g) Cleanliness requirements or warning not to open except in a clean room environment (where the Flight Item is precision cleaned or for any reason should only be opened in a clean room environment).
- 2. Flight Items that will be stowed for flight with no further processing shall be delivered ready for flight stowage by Seller and annotated on the shipping document, e.g., "ready for flight; no further processing required". The fact that the item has been packaged with certified flight materials shall be marked in some manner on the inner packaging. If it is not feasible to mark the innermost packaging as flight certified material, then a note on the packaging material that is to be removed just prior to stowage shall state "Remove [insert items to be removed] before flight/stowage" OR "Remove [insert items to be removed] before flight/stowage except for [insert exceptions]".
- 3. In the event Buyer provides specific labels, those labels shall be applied in

accordance with the accompanying instructions to the packaging containing the Flight Items for which the labels were provided.

- 4. If no special handling requirements apply to the Flight Item, the Flight Item shipping documentation shall state "No Special Handling Requirements" or words to that effect.
- 5. Seller's packaging specifications or procedures may be utilized if they are (a) not in conflict with cited Government specifications and (b) approved in writing by the Contracting Officer. In the event of any conflict between Government, Buyer, and Seller specifications or procedures, the Government documents shall take precedence over all else, and Buyer documents shall take precedence over Seller specifications or procedures.

Support for Government Inspection and Acceptance

(DD Form 250) at

Source.

- 1. In the event of inspection (CQA) and/or acceptance requirements to be performed by the Government at Seller or a subcontractor of Seller (e.g., direct shipment to NASA or delivery-in-place), Buyer shall prepare the DoD FAR Supplement 253.303-250 DD Form 250, Material Inspection and Receiving Report (DD Form 250), and furnish the prepared DD Form 250 to Seller for presentation to Buyer Source Inspection Representative or Government Representative as directed by Buyer.
- 2. Seller shall support Buyer's DD Form 250 preparation effort by promptly providing, upon request, the following information:
- (a) Estimated date the shipment will be made available for Buyer/government inspection.
- (b) Cage Code and complete street address of the "shipped from" location.
- (c) The Federal Stock Number (FSN), or non-catalog number and, if applicable, prefix or suffix, for each item. Other needed identification such as the manufacturer's name or Federal Supply Code (as published in Cataloging Handbook H4-1), and part number. The descriptive noun of the item nomenclature and, if provided, the Government-assigned management/material control code. In the case of equal-kind supply items, the description without regard to kind (e.g., "Resistor"), size, quantity, and type information. Make, model, serial number, lot, batch, hazard indicator, and/or similar description.
- (d) Estimated gross shipping weight in pounds, quantity of packages, and, if more than one package will be used, the package number and contents of each package.
- (e) Any special handling instructions/limits for material environmental control (e.g., temperature, humidity, aging, freezing, and shock).
- (f) Whether Government-furnished property (GFP) is included with or incorporated into each item.
- (g) For items shipped with missing components, the FSN or comparable identification, quantity, estimated value, and authority, for each missing component.
- (h) Whether each item is a component that was short on a prior shipment, and, for components that were short on a prior shipment, the date of the prior shipment.
- 3. Seller shall enclose the Buyer-specified number of copies of the Buyerfurnished DD Form 250 in the lowest numbered package of the shipment or seal them in a waterproof envelope, which shall be securely attached to the exterior of the lowest numbered package of the shipment in the most protected location. If there is more than one package in the shipment, Seller shall print the words "CONTAINS DD FORM 250" on the package containing the DD Form 250.

(a) An employee of a domestic Johnson Space Center (JSC) contractor or its subcontractor who is not a U. S. citizen (foreign national) may not be admitted to the JSC site for purposes of performing work without special arrangements. In addition, all employees or representatives of a foreign JSC contractor/subcontractor may not be admitted to the JSC site without special arrangements. For employees as described above, advance notice must be given to the Security Office of the host installation [JSC or White Sands Test Facility (WSTF)] at least 3 weeks prior to the scheduled need for access to the site so that instructions on obtaining access may be provided. Contractors should be aware that approval for access to the site and issuance of a badge may take much longer than three weeks and sufficient lead time must be allowed to accommodate the approval process.

(b) All visit/badge requests for persons described in (a) above must be entered in the NASA Foreign National Management System (NFNMS) for acceptance, review, concurrence and approval purposes. When an authorized company official requests a JSC or WSTF badge for site access, he/she is certifying that steps have been taken to ensure that its contractor or subcontractor employees, visitors, or representatives will not be given access to export-controlled or classified information for which they are not authorized. The authorized company officials shall serve as the contractor's representative(s) in certifying that all visit/badge request forms are processed in accordance with JSC and WSTF security and export control procedures.

No foreign national, representative, or resident alien contractor/subcontractor employee shall be granted access into JSC or WSTF until approved and processed through the NFNMS. Unescorted access will not be granted unless a favorable National Agency Check (NAC) has been completed by the JSC Security Office, and an approved NASA Foreign National Visitor Security/Technology Control Plan (STTCP), (previously called the Access Control Plan) has been submitted and approved.

(c) The contractor agrees that it will not employ for the performance of work onsite at the JSC or WSTF any individuals who are not legally authorized to work in the United States. If the JSC or WSTF Industrial Security Specialist or the contracting officer has reason to believe that any employee of the contractor may not be legally authorized to work in the United States and/or on the contract, the contractor may be required to furnish copies of Form I-9 (Employment Eligibility Verification), U. S. Department of Labor Application for Alien Employment Certification, and any other type of employment authorization document.

The contractor agrees to provide the information requested by the JSC or WSTF Security Office in order to comply with NASA policy directives and guidelines related to foreign visits to NASA facilities so that (1) the visitor/employee/representative may be allowed access to JSC or other NASA Centers for performance of this contract, (2) required investigations can be conducted, and (3) required annual or revalidation reports can be submitted to NASA Headquarters. All requested information must be submitted in a timely manner in accordance with instructions provided by JSC or any other Center to be visited.

IDENTIFICATION OF EMPLOYEES JSC 52.242-92 (JAN 2006)

At all times while on Government property, the Contractor, subcontractors, their employees and agents shall wear badges which will be issued by the NASA Badging & Visitor Control Office, located in Building 110 at the Johnson Space Center (JSC), or at the Main Gate at the White Sands Test Facility (WSTF). JSC employee and visitor badges will be issued only between the hours of 6:00 a.m. to 7:30 p.m., Monday through Friday, and 7:00 am to 4:00 pm on Saturday and Sunday. WSTF employee badges will be issued only between the hours of 8 a.m. to 2 p.m., Monday through Friday. WSTF visitor badges will be issued on a 7-day a week, 24-hour a day basis. Resident aliens and foreign nationals/representatives shall be issued green foreign national badges.

Each individual who wears a badge shall be required to sign personally for the badge. The contractor shall be held accountable for issued badges and all other related items and must assure that they are returned to the NASA Badging & Visitor Control Offices upon completion of work under the contract in accordance with Security Management Directive (SMD) 500-15, "Security Termination Procedures." Failure to comply with the NASA contractor termination procedures upon completion of the work (e.g., return of badges, keys, CAA cards, clearance terminations, JSC Public Key Infrastructure (PKI)/special program deletions, etc.) may result in final payment being delayed.

H.61 ADMINISTRATIVE LEAVE (JS C 52.242-94) (S EP 2008)

- (a) When the NASA installation grants administrative leave to its Government employees (e.g., as a result of inclement weather, potentially hazardous conditions, or other special circumstances), the following personnel should also be dismissed upon notification of a center closure provided by the Contracting Officer:
- 1. Contractor personnel and its subcontractor personnel working on-site; and
- 2. Contractor personnel and its subcontractor personnel dedicated to the Contract effort who are
- A. working off-site within 10 miles of JSC; and
- B. unable to perform their Contract duties at their off-site location because their normal place of business has been or is expected to be negatively impacted by an emergency situation (e.g. has sustained damage, has been evacuated, etc.).

However, contractor personnel and its subcontractors shall provide sufficient on-site personnel to perform round-the-clock requirements of critical work already in process, unless otherwise instructed by Buyer or authorized representative.

- (b) Administrative leave granted under this clause shall be subject to modification or termination by the Contracting Officer and in all instances shall be subject to the availability of funds in accordance with the FAR clause 52.232-22 "Limitation of Funds Clause". The cost of salaries and wages to the contractor and its subcontractors for the period of any such excused absence shall be a reimbursable item of cost under this Contract for effected employees in accordance with contractor's established accounting policy.
- 1. If a labor hour-based Contract, administrative leave granted under this clause shall be accounted for consistent with productive hours under this Contract for employees in accordance with contractor's established accounting policy.
- 2. For fixed price Contracts based on other than labor hours for deliverables, the Contracting Officer and the contractor shall as a precondition to any reimbursement negotiate an advanced agreement to determine the appropriate method in which to grant administrative leave under this clause.
- 3. All invoices requesting payment under this clause shall be prepared in accordance with the contractor's established accounting procedures. This clause is not applicable to the contractor or their lower tier subcontractors who have adequate casualty damage insurance and or adequate suspended operations labor insurance as determined for each instance of a declared administrative leave. However, should the insurance as payer of first resort fail to cover costs of such leave, the coverage contained within this provision will then be applicable to the contractor and such subcontractors.

All invoices requesting payment under a labor hour or fixed price Contract shall be marked as "Administrative Leave in accordance with 52.242-94, Administrative Leave." All such invoices paid will be subject to review, audit, and revision when routine operations recommence.

(c) The contractor shall include this clause in all services subcontracts that include personnel in the categories described in (a) above.