

CUSTOMER CONTRACT REQUIREMENTS
ARES 1 Upper Stage Production
CUSTOMER CONTRACT NNM07181505R

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 (Sep 2006). Alt. 1 (OCT 1995). This clause applies only if this clause exceeds \$100,000. This Alternate applies only if the contract is for commercial items and exceeds \$100,000.

52.203-7 Anti-Kickback Procedures (excluding subparagraph (c)(1)) (Jul 1995). Buyer may withhold 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 \$100,000. 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 (Apr 1991). This clause applies only if this contract exceeds \$100,000.

52.203-12 Limitation on Payments to Influence Certain Federal Transactions (Sep 2005). 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.

52.211-15 Defense, Priority and Allocation Requirements (SEP 1990)

52.215-2 Audit and Records - Negotiation (Jun 1999). This clause applies only if this contract exceeds \$100,000 and (i) is cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these types: (ii) Seller was required to provide cost or pricing data, or (iii) Seller is required to furnish reports as discussed in paragraph (e) of the referenced clause.

52.215-9 Changes or Additions to Make-or-Buy Program (OCT 1997)

52.215-11 Price Reduction For Defective Cost or Pricing Data - Modifications (Oct 1997). This clause applies only if this contract exceeds the threshold set forth in FAR 15.403-4 and is not otherwise exempt. "Contracting Officer" shall mean "Contracting Officer or Buyer." In subparagraph (d)(2)(i)(A), delete "to the Contracting Officer." In subparagraph (d)(2)(ii)(B), "Government" means "Government" or "Buyer." In Paragraph (e), "United States" shall mean "United States or Buyer." .

52.215-13 Subcontractor Cost or Pricing Data - Modifications (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 "The Boeing Company or any of its wholly owned subsidiaries".

52.215-14 Integrity of Unit Prices (excluding subparagraph (b)) (Oct 1997). This clause applies except for contracts at or below \$100,000; 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 (Oct 2004). 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) (Jul 2005). 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 Requirements for Cost or Pricing Data or Information Other Than Cost or 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** (May 2004).
- 52.219-9 Small Business Subcontracting Plan** (Sep 2006). In paragraph (c), "Contracting Officer" shall mean Buyer. This clause applies only if this contract exceeds \$550,000. and Seller is not a small business concern.
- 52.222-4 Contract Work Hours and Safety Standards Act - Overtime Compensation** (Jul 2005). Buyer may withhold or recover from Seller the amount of any sums the Contracting Officer withholds or recovers from Buyer because of liabilities of Seller or its subcontractors under this clause.
- 52.222-20 Walsh-Healey Public Contracts Act** (Dec 1996)
- 52.222-21 Prohibition of Segregated Facilities** (Feb 1999).
- 52.222-26 Equal Opportunity (subparagraph (b)(1) through (11))** (Apr 2002).
- 52.222-35 Equal Opportunity for Special Disabled, Veterans of the Vietnam Era, and Other Eligible Veterans** (Sep 2006). 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 Eligible Veterans** (Sep 2006). This clause applies only if this contract exceeds \$25,000.
- 52.222-39 Notification of Employee Rights Concerning Payment of Union Dues or Fees** (Dec 2004). This clause applies only if this contract exceeds \$100,000.
- 52.223-13 Certification of Toxic Chemical Release Reporting** (AUG 2003)
- 52.223-14 Toxic Chemical Release Reporting (excluding subparagraph (e))** (Aug 2003). This clause applies only if this contract is not for commercial

items as defined in FAR Part 2, was competitively awarded, and exceeds \$100,000 (including all options).

52.224-2 Privacy Act (Apr 1984). This clause applies only if Seller is required to design, develop, or operate a system of records contemplated by this clause.

52.225-13 Restrictions on Certain Foreign Purchases (Feb 2006).

52.227-1 Authorization and Consent (Jul 1995).

52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement (AUG 1996)

52.227-11 Patent Rights – Retention by the Contractor (Short Form) (JUN 1997)

52.227-14 Rights in Data - General (Jun 1987). This clause applies only if data will be produced, furnished or acquired under this contract.

52.227-15 Representation of Limited Rights Data and Restricted Computer Software (May 1999)

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 (Apr 2005). Add "Buyer and the" before "CFAO" in paragraph (m). This provision applies if Clause H001, H002 or H004 is included in Buyer's contract.

52.244-6 Subcontracts for Commercial Items (Sep 2006).

52.245-18 Special 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.

52.247-63 Preference for U.S.-Flag Air Carriers (Jun 2003). This clause only applies if this contract involves international air transportation.

52.248-1 Value Engineering (excluding subparagraph (f)) (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.

18-52.208-81 Restrictions on Printing and Duplicating (Nov 2004).

18-52.211-70 Packaging, Handling, and Transportation (Nov 2004)

18-52.219-74 Use of Rural Area Small Businesses (Sep 1990). This clause applies only if this contract offers subcontracting possibilities.

18-52.219-75 Small Business Subcontracting Reporting (May 1999). This clause applies if FAR 52.219-9 is included in this contract.

18-52.219-76 NASA 8 Percent Goal (Jul 1997). This clause applies only if Seller is not a small business.

18-52.223-70 Safety and Health (Apr 2002). This clause applies only if this contract exceeds \$1,000,000 or construction, repairs or alteration in excess of \$100,000, or it involve the use of hazardous materials or operations.

18-52.223-74 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.

18-52.223-75 Major Breach of Safety or Security (Feb 2002)

18-52.225-70 Export Licenses (Feb 2000) - Alternate I (Feb 2000).

18-52.227-11 Patents Rights -- Retention by the Contract (Short Form)
This clause only applies if this Contract is for experimental, developmental, or research work and Seller is other than a small business firm or nonprofit organization.

18-52.227-14 Rights in Data - General This clause applies only if data will be produced, furnished or acquired under this contract except contracts for basic or applied research with universities or colleges.

18-52.227-70 New Technology (Dec 2006). This clause only applies if this Contract is for experimental, developmental, or research work and Seller is other than a small business firm or nonprofit organization.

18-52.227-72 Designation of New Technology Representative (Jul 1997). The new technology representative (if any) will be designated in this contract. This is applicable to this contract if it includes a "New Technology" clause or a " Patents Rights -- Retention by the Contract (Short Form)" clause.

18-52.227-86 Commercial Computer Software Licensing (Dec 1987). This clause applies only if Seller's software will be delivered to NASA under licensing.

18-52.228-76 Cross-Waiver of Liability for Space Station Operations (Dec 1994).

18-52.237-72 Access to Sensitive Information (Jun 2005).

18-52.242-72 Observance of Legal Holidays (Aug 1992) **Alt. II** (Oct 2000)

18-52.244-70 Geographic Participation in the Aerospace Program (Apr 1985). This clause applies only if this contract is for \$100,000 or more.

18-52.246-73 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:

52.219-8 Utilization of Small Business Concerns (May 2004).

This clause applies only if the supplies are of a type described in paragraph (b)(2) of this clause. In paragraph (d), "45 days" is changed to "60 days." In paragraph (g) "Government" means Buyer. If this contract is at or below \$100,000, paragraphs (f) and (g) are excluded.

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 Handicapped Workers (Jun 1998). This clause applies only if this contract exceeds \$10,000.

52.222-39 Notification of Employee Rights Concerning Payment of Union Dues or Fees (Dec 2004). This clause applies only if this contract exceeds \$100,000.

52.247-64 Preference for Privately-Owned U.S. Flag Commercial Vessels (Feb 2006). In paragraph (C)(2) "20" and "30" are changed to 10 and 20 respectively.

4. Cost Accounting Standards.

(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. .

(2) (Applicable if this contract incorporates clause H002). The version of FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices, incorporated by clause H002 is the version dated April 1998. .

(3) (Applicable if this contract incorporates clause H004). The version of FAR 52.230-5, Cost Accounting Standards ? Educational Institution, incorporated by clause H004 is the version dated April 1998. .

5. The following prime contract special provisions apply to this purchase order:

A. ASBESTOS MATERIAL (MSFC 52.223-90) (JUN 2002)

During performance of this contract, Contractor personnel performing work in MSFC buildings may come in contact with materials containing asbestos. MSFC Buildings 4200, 4201, 4202, 4663, and 4666 are of special concern since they are known to contain a sprayed on fire insulation on or above the ceiling, usually located on the metal or concrete structure of the buildings. These buildings and all other MSFC buildings may contain asbestos in floor tile, pipe and lagging insulation, exterior siding, roofing felt, and many other building materials. Prior to disturbing suspected asbestos material in any manner, the Contractor shall notify MSFC's Occupational Medicine and Environmental Health Services, for guidance. Contractor shall be responsible for ensuring that all Contractor personnel working onsite are made aware of and comply with this clause.

B. COMMUNICATION WITH BOEING CUSTOMER

1. Boeing shall be solely responsible for all liaison, coordination, status requests, and other communication with, and deliveries to, the Boeing Customer (i.e., NASA, referred to herein as the "Boeing Customer"),

concerning the Ares I Upper Stage Proposal, this subcontract, and any related lower-tier subcontract. Subcontractor and its lower-tier subcontractors shall not contact the Boeing Customer, or otherwise attempt to lobby, intervene in or status contract actions, negotiations or discussions, or otherwise release information to such Boeing Customer(s), either directly or indirectly (except through Boeing), without Boeing's written direction. Subcontractor agrees that no public announcement will be made except through, or as approved in writing by Boeing.

2. Exceptions to the general rule stated in paragraph 1., above, shall be made: (i) when an authorized Boeing person is present at a face-to-face meeting, or when an authorized Boeing person is involved as a participant in the telephone conversation, and consents to the communication; or, (ii) when a release relates solely to Subcontractor's internal processes, proprietary rates expressly excluded from release to Boeing under subcontract terms and conditions, or Government allegations of the Subcontractor's or a lower-tier subcontractor's misconduct, or (iii) pursuant to a properly issued subpoena or other order of a court of competent jurisdiction, or (iv) as is required to respond to questions initiated by a Federal auditor in the course of a Program audit. In the event an exception applies, written notice of any statement and/or the questions and answers will be provided by the Subcontractor to the cognizant authorized Boeing Procurement Agent within two business days of the communication.

3. Further, except as required by law, no release of information, or confirmation or denial of same, with respect to the prime contract, this subcontract or a related lower-tier subcontract, or the subject matters thereof, will be made by Subcontractor without the prior written approval of Boeing.

4. Subcontractor agrees to incorporate the substance of this clause, suitably adjusted, in all lower-tier subcontracts under this subcontract

C. CONTRACTOR EMPLOYEE BADGING AND EMPLOYMENT TERMINATION CLEARANCE (MFSC 52.204-90) (NOV 1999)

(a) It is anticipated that performance of the requirements of this contract will require employee access to and picture badging by the MSFC. Contractor requests for badging of employees shall be by MSFC Form 1739, "MSFC Contractor Badge/Decal Application." Requests for badging shall be submitted to the appointed COTR for completion and approval prior to processing by the MSFC Protective Services Department.

(b) The Contractor shall establish procedures to ensure that each badged employee is properly cleared in accordance with MSFC Form 383-1, "Contractor Employee Clearance Document," prior to finalization of employment termination.

(c) Requests for copies of MSFC Forms 383-1, and 1739 shall be directed to the MSFC Protective Services Department, Marshall Space Flight Center, Alabama 35812 .

D. HAZARDOUS MATERIAL REPORTING (MSFC 52.223-91) (AUG 2005)

(a) If during the performance of this contract, the Contractor transports or accepts delivery of any hazardous materials (hazardous as defined under the latest version of Federal Standard No. 313, including revisions adopted during the term of the contract) on-site to MSFC, the hazardous material shall be processed through MSFC Central Receiving to be bar-coded for inventory. Chemical containers shall be managed in accordance with the provisions of MWI 8550.5, "Hazardous Material Management." The Contractor shall be responsible for ensuring that all Contractor/subcontractor personnel are made aware of and comply with this clause.

(b) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material; or with clauses regarding hazardous materials, which may be contained in the order.

E. RELEASE OF SENSITIVE INFORMATION (NFS 1852.237-73) (JUN 2005)

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

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

subject to the enumerated protections mandated by the clause at 1852.237-72, Access to Sensitive Information.

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

Mark the title page with the following legend:

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

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

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

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

(d) To receive access to sensitive information needed to assist NASA in accomplishing management activities and administrative functions, the service provider must be operating under a contract that contains the clause at 1852.237-72, Access to Sensitive Information. This clause obligates the service provider to do the following:

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

- (2) Utilize any sensitive information coming into its possession only for the purpose of performing the services specified in its contract.
 - (3) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.
 - (4) Allow access to sensitive information only to those employees that need it to perform services under its contract.
 - (5) Preclude access and disclosure of sensitive information to persons and entities outside of the service provider's organization.
 - (6) Train employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in its contract and to safeguard it from unauthorized use and disclosure.
 - (7) Obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.
 - (8) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the CO, and implement any necessary corrective actions.
- (e) When the service provider will have primary responsibility for operating an information technology system for NASA that contains sensitive information, the service provider's contract shall include the clause at 1852.204-76, Security Requirements for Unclassified Information Technology Resources. The Security Requirements clause requires the service provider to implement an Information Technology Security Plan to protect information processed, stored, or transmitted from unauthorized access, alteration, disclosure, or use. Service provider personnel requiring privileged access or limited privileged access to these information technology systems are subject to screening using the standard National Agency Check (NAC) forms appropriate to the level of risk for adverse impact to NASA missions. The CO may allow the service provider to conduct its own screening, provided the service provider employs substantially equivalent screening procedures.
- (f) This clause does not affect NASA's responsibilities under the Freedom of Information Act.
- (g) The Contractor shall insert this clause, including this paragraph (g), suitably modified to reflect the relationship of the parties, in all subcontracts that may require the

F. SECURITY/BADGING REQUIREMENTS FOR FOREIGN NATIONAL VISITORS AND EMPLOYEES OF FOREIGN CONTRACTORS (Applies to MSFC and MAF)

- (a) An employee of a domestic MSFC Contractor or its subcontractor who is not a citizen (foreign national) may not be admitted to the MSFC site for purposes

of performing work without special arrangements. In addition, all employees or representatives of a foreign MSFC Contractor/subcontractor may not be admitted to the MSFC site without special arrangements. For employees as described above, advance notice must be given to the MSFC Protective Services Office at least 3 weeks prior to the scheduled need for access to the site so that instructions on obtaining access may be provided.

(b) All visit / badge requests for persons described in paragraph (a) above must be entered in the NASA Foreign National Management System (NFMMS) for acceptance, review, concurrence and approval purposes. When an authorized company official requests a MSFC 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 MSFC security and export control procedures. No foreign national, representative, or resident alien Contractor/subcontractor employee shall be granted access into MSFC until a completed request has been approved and processed through the NFMMS. Unescorted access will not be granted unless the MSFC Protective Services Office has completed a favorable National Agency Check (NAC).

(c) The Contractor agrees that it will not employ for the performance of work onsite at the MSFC any individuals who are not legally authorized to work in the . If the MSFC Industrial Security Specialist or the CO 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 federal Form I-9 (Employment Eligibility Verification), U.S. Department of Labor Application for Alien Employment Certification, and any other type of employment authorization document.

(d) The Contractor agrees to provide the information requested by the MSFC Protective Services 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 MSFC 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 MSFC or any other Center to be visited.

G. SPECIAL PROVISION FOR CONTRACT CHANGES

The parties agree that, notwithstanding the provisions of the "Changes" clause and the "Government Property" clause, if a change in the prime contract is \$500,000 or less, and causes a change in this subcontract, no equitable adjustment

in the estimated cost or fee will be made in this subcontract. Each change in the prime contract shall be controlling in making this determination, and such change shall not, for purposes of determining the applicability of this clause, be added to any other changes(s). The parties recognize that several changes may be grouped together in a bilateral modification for definitization; however, the dollar value of each individual change will be controlling in determining whether or not an equitable adjustment is in order.

H. 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 .

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 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 CO. In order to obtain this written approval to subcontract with any Russian entity as defined in paragraphs (a), the Contractor shall provide the CO with the following information related to each planned new subcontract and any change to an existing subcontract with entities that fit the description in paragraphs (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.

(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>

Denied Parties, Specially Designated Nationals and Entities of Concern

[BIS's Listing of Entities of Concern](#)
[BIS's List of Denied Parties](#)

[OFAC's List of Specially Designated Nationals](#) (Adobe PDF format)
[List of Unverified Persons in Foreign Countries](#)

(ii) Unless relief is granted by the CO, the information necessary to obtain approval to subcontract shall be provided to the CO 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 CO with a report every 6 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 CO may direct the Contractor to provide additional information for any other prospective or existing subcontract at any tier. The CO may direct the Contractor to terminate for the convenience of the government any subcontract at any tier with an entity described in paragraphs (a), 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 CO to enter into any tier subcontract that involves entities defined in paragraph (a).

I. TECHNICAL DATA DECLARATION, REVISION, AND WITHHOLDING OF PAYMENT - MAJOR SYSTEMS (FAR 52.227-21) (JAN 1997)

(a) *Scope of clause.* This clause shall apply to all technical data (as defined in the Rights in Data-General clause included in this contract) that have been specified in this contract as being subject to this clause. It shall apply to all such data delivered, or required to be delivered, at any time during contract performance or within 3 years after acceptance of all items (other than technical data) delivered under this contract unless a different period is set forth herein. The CO may release the Contractor from all or part of the requirements of this clause for specifically identified technical data items at any time during the period covered by this clause.

(b) Technical data declaration.

(1) All technical data that are subject to this clause shall be accompanied by the following declaration upon delivery:

Technical Data Declaration (Jan 1997)

The Contractor, _____, hereby declares that, to the best of its knowledge and belief, the technical data delivered herewith under Government contract No. _____ (and subcontract _____, if

appropriate) are complete, accurate, and comply with the requirements of the contract concerning such technical data.

(End of Declaration)

(2) The Government shall rely on the declarations set out in paragraph (b)(1) of this clause in accepting delivery of the technical data, and in consideration thereof may, at any time during the period covered by this clause, request correction of any efficiencies which are not in compliance with contract requirements. Such corrections shall be made at the expense of the Contractor. Unauthorized markings on data shall not be considered a deficiency for the purpose of this clause, but will be treated in accordance with paragraph (e) of the Rights in Data-General clause included in this contract.

(c) *Technical data revision.* The Contractor also agrees, at the request of the CO, to revise technical data that are subject to this clause to reflect engineering design changes made during the performance of this contract and affecting the form, fit, and function of any item (other than technical data) delivered under this contract. The Contractor may submit a request for an equitable adjustment to the terms and conditions of this contract for any revisions to technical data made pursuant to this paragraph.

(d) Withholding of payment.

(1) At any time before final payment under this contract the CO may, in the Government's interest, withhold payment until a reserve not exceeding \$100,000 or 5 percent of the amount of this contract, whichever is less, if in the CO's opinion respecting any technical data that are subject to this clause, the Contractor fails to-

(i) Make timely delivery of such technical data as required by this contract;

(ii) Provide the declaration required by paragraph (b)(1) of this clause;

(iii) Make the corrections required by paragraph (b)(2) of this clause; or

(iv) Make revisions requested under paragraph (c) of this clause.

(2) Such reserve or balance shall be withheld until the CO has determined the Contractor has delivered the data and/or has made the required corrections or revisions. Withholding shall not be made if the failure to make timely delivery, and/or the deficiencies relating to delivered data, arose out of causes beyond the control of the Contractor and without the fault or negligence of the Contractor.

(3) The CO may decrease or increase the sums withheld up to the sums authorized in paragraph (d)(1) of this clause. The withholding of any amount

under this paragraph, or the subsequent payment thereof, shall not be construed as a waiver of any Government rights.

**J. EARNED VALUE MANAGEMENT SYSTEM (NFS 1852.234-2)
(NOV 2006)**

(a) In the performance of this contract, the Contractor shall use—

(1) An Earned Value Management System (EVMS) that has been determined by the Cognizant Federal Agency to be compliant with the EVMS guidelines specified in the American National Standards Institute (ANSI)/Electronic Industries Alliance (EIA) – 748 Standard, Industry Guidelines for Earned Value Management Systems (current version at the time of award) to manage this contract; and

(2) Earned Value Management procedures that provide for generation of timely, accurate, reliable, and traceable information for the Contract Performance Report (CPR) required by the contract.

(b) If, at the time of award, the Contractor's EVMS has not been determined by the Cognizant Federal Agency to be compliant with the EVMS guidelines, or the Contractor does not have an existing cost/schedule control system that is compliant with the guidelines in the ANSI/EIA-748 Standard (current version at the time of award), the Contractor shall apply the system to the contract and shall take timely action to implement its plan to obtain compliance/validation. The Contractor shall follow and implement the approved compliance/validation plan in a timely fashion. The Government will conduct a Compliance Review to assess the contractor's compliance with its plan, and if the Contractor does not follow the approved implementation schedule or correct all resulting system deficiencies identified as a result of the compliance review within a reasonable time, the Contracting Officer may take remedial action, that may include, but is not limited to, a reduction in fee.

(c) The Government will conduct Integrated Baseline Reviews (IBRs). Such reviews shall be scheduled and conducted as early as practicable, and if a pre-award IBR has not been conducted, a post-award IBR should be conducted within 180 calendar days after contract award, or the exercise of significant contract options, or within 60 calendar days after distribution of a supplemental agreement that implements a significant funding realignment or effects a significant change in contractual requirements (e.g., incorporation of major modifications). The objective of IBRs is for the Government and the Contractor to jointly assess the Contractor's baseline to be used for performance measurement to ensure complete coverage of the statement of work, logical scheduling of the work activities, adequate resourcing, and identification of inherent risks.

(d) Unless a waiver is granted by the Cognizant Federal Agency, Contractor proposed EVMS changes require approval of the Cognizant Federal Agency prior to

implementation. The Cognizant Federal Agency shall advise the Contractor of the acceptability of such changes within 30 calendar days after receipt of the notice of proposed changes from the Contractor. If the advance approval requirements are waived by the Cognizant Federal Agency, the Contractor shall disclose EVMS changes to the Cognizant Federal Agency at least 14 calendar days prior to the effective date of implementation.

(e) The Contractor agrees to provide access to all pertinent records and data requested by the Contracting Officer or a duly authorized representative. Access is to permit Government surveillance to ensure that the Contractor’s EVMS complies, and continues to comply, with the EVMS guidelines referenced in paragraph (a) of this clause, and to demonstrate—

(1) Proper implementation of the procedures generating the cost and schedule information being used to satisfy the contract data requirements;

(2) Continuing application of the accepted company procedures in satisfying the CPR required by the contract through recurring program/project and contract surveillance; and

(3) Implementation of any corrective actions identified during the surveillance process.

(f) The Contractor shall be responsible for ensuring that its subcontractors, identified below, comply with the EVMS requirements of this clause as follows:

(1) For subcontracts with an estimated dollar value of \$50M or more, the following subcontractors shall comply with the requirements of this clause.

(Contracting Officer to insert names of subcontractors or subcontracted effort).

(TO BE COMPLETED WITH PROPOSAL)

(2) For subcontracts with an estimated dollar value of less than \$50M, the following subcontractors shall comply with the requirements of this clause except for the requirement in paragraph (b), if applicable, to obtain compliance/validation.

(TO BE COMPLETED WITH PROPOSAL)

(g) If the contractor identifies a need to deviate from the agreed baseline by working against an Over Target Baseline (OTB) or Over Target Schedule (OTS), the

contractor shall submit to the Contracting Officer a request for approval to begin implementation of an OTB or OTS. This request shall include a top-level projection of cost and/or schedule growth, whether or not performance variances will be retained, and a schedule of implementation for the reprogramming adjustment. The Government will approve or deny the request within 30 calendar days after receipt of the request. Failure of the Government to respond within this 30-day period constitutes approval of the request. Approval of the deviation request does not constitute a change, or the basis for a change, to the negotiated cost or price of this contract, or the estimated cost of any undefinitized contract actions.

**K. SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION
TECHNOLOGY RESOURCES (NFS 1852.204-76) (NOV 2004)
(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.

(b) The Contractor shall provide, implement, and maintain an IT Security Plan. This plan shall describe the processes and procedures that will be followed to ensure appropriate security of IT resources that are developed, processed, or used under this contract. The plan shall describe those parts of the contract to which this clause applies. The Contractor's IT Security Plan shall be compliant with Federal laws that include, but are not limited to, the Computer Security Act of 1987 (40 U.S.C. 1441 et seq.) and the Government Information Security Reform Act of 2000. The plan shall meet IT security requirements in accordance with Federal and NASA policies and procedures that include, but are not limited to:

- (1) OMB Circular A-130, Management of Federal Information Resources, Appendix III, Security of Federal Automated Information Resources;

(2) NASA Procedures and Guidelines (NPR) 2810.1, Security of Information Technology; and

(3) Chapter 3 of NPR 1620.1, NASA Security Procedures and Guidelines.

(c) Within 30 days after contract award, the Contractor shall submit for NASA approval an IT Security Plan. This plan must be consistent with and further detail the approach contained in the offeror's proposal or sealed bid that resulted in the award of this contract and in compliance with the requirements stated in this clause. The plan, as approved by the CO, shall be incorporated into the contract as a compliance document.

(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 NPR 2810.1, Section 4.5; NPR 1620.1, 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 CO 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 CO 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 CO under paragraph (d)(4) of this clause.

(e) The Contractor shall ensure that its employees, in performance of the contract, receive annual IT security training in NASA IT Security policies, procedures, computer ethics, and best practices in accordance with NPR 2810.1, Section 4.3 requirements. The Contractor may use web-based training available from NASA to meet this requirement.

(f) The Contractor shall afford NASA, including the Office of Inspector General, 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.

L. INFORMATION TECHNOLOGY (IT) MANAGEMENT

a. For IT applications, other than mission-specific flight and non-flight software, the Contractor shall use Commercial-off-the-Shelf and existing Government-off-the-Shelf products where cost effective to NASA. All IT applications, other than mission-specific flight and non-flight software shall comply with NASA requirements as outlined in NPR 7150.2, NASA Software Engineering Requirements for the appropriate software classes, limited to classes E, F, and G.

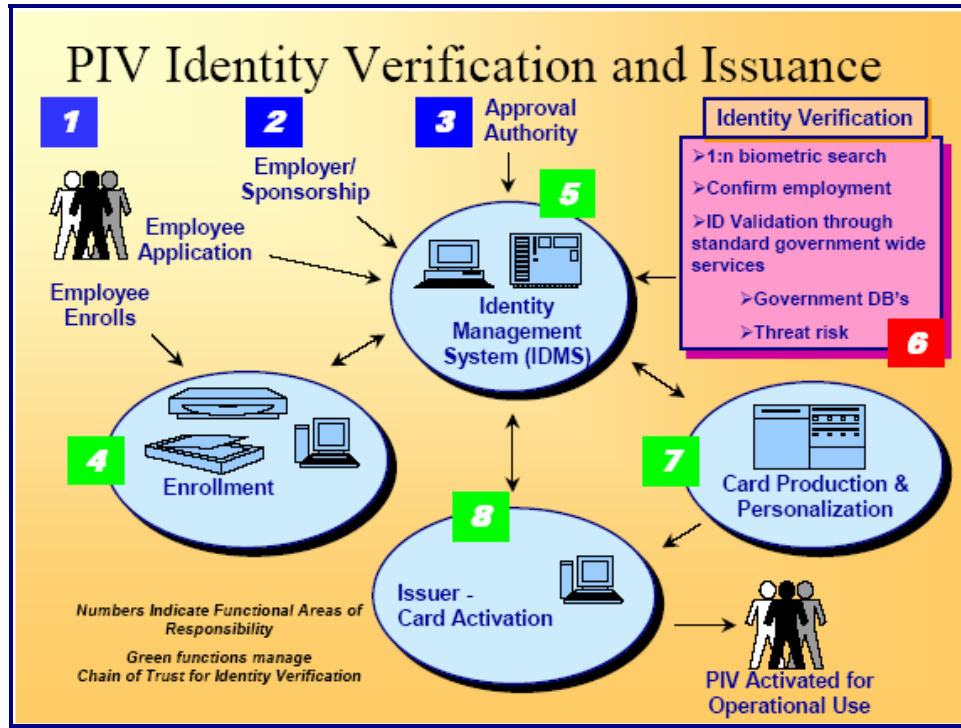
b. The Contractor shall develop, update, and implement a Contract Information Technology Security Program Plan (CITSP) in accordance with DRD1145CD-CITSPP.

c. The Contractor shall develop, update and implement an IT Security Requirements Compliance Document (ITSRCD) in accordance with DRD1145CD-ITSRCD.

M. PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL FAR 52.204-9 (Nov 2006)

PIV Card Issuance Procedures (in accordance with FAR Clause 52.204-9, Personal Identity Verification of Contractor Personnel, and Clause G11, Personal Identity Verification of Contractor Personnel):

Picture J-10-1 graphically displays the following procedure for the issuance of a PIV credential.



Picture J-10-1

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 (NFMMS) 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 of which must be a Federal^[1] 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 a

^[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.

National Crime Information Center (NCIC) with an Interstate Identification Index check is/has been performed. 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.

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.

ALTERNATIVE FOR APPLICANTS WHO DO NOT HAVE A COMPLETED AND ADJUDICATED NAC AT THE TIME OF ENTRANCE ON DUTY

Steps 1 through 4 shall be accomplished for all applicants in accordance with the process described above. If the applicant is unable to appear in person until the time of entry on duty, or does not, for any other reason, have a completed and adjudicated NAC portion of the NACI at the time of entrance on duty, the following interim procedures shall apply.

1. If the documents required to submit the NACI have not been completed prior to EOD, the applicant will be instructed to complete all remaining requirements for submission of the investigation request. This includes presentation of I-9 documents and completion of fingerprints, if not already accomplished. If the applicant fails to complete these activities as prescribed in NPR 1600.1 (Chapters 3 & 4), it may be considered as failure to meet the conditions required for physical access to a federally-controlled facility or access to a Federal information system, and result in denial of such access.

2. Based on favorable results of the NCIC, the applicant shall be issued a temporary NASA identification card for a period not-to-exceed six months. If at the end of the six month period the NAC results have not been returned, the agency will at that time make a determination if an additional extension will be granted for the temporary identification card.

3. Upon return of the completed NAC, the process will continue from Step

N. EXPORT COMPLIANCE OF INTERNATIONAL SHIPMENTS

The Supplier shall perform the following actions (if required for International shipments only):

- a) Assign the appropriate Export Control Classification Number (ECCN) or United States Munitions List Category number to each drawing, plan, specification or document for hardware and software.
- b) Obtain the appropriate export or import licenses, authorization, agreements as pertaining to Supplier/Subcontractor activities.
- c) Apply the correct export warning marking to each drawing, plan, specification or document.
- d) Comply with all applicable export/import laws, regulations and provisions provided by the U.S. Government and the Program.