

**Commercial Resupply Services Contract  
General Terms and Conditions & Government Contract Flow-Down Provisions  
Time and Material Orders**

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THIS ADDENDUM IS APPLICABLE TO ORDERS ISSUED UNDER THE ABOVE CONTRACT ONLY AND REVISES THE TERMS AND CONDITIONS OF CTM-P-ST-003:

CLAUSE 58. FEDERAL ACQUISITION REGULATION (FAR) AND DEFENSE FAR SUPPLEMENT (DFARS) FLOWDOWN PROVISIONS is deleted in its entirety and replaced with the following:

**CLAUSE 58. ORDERS UNDER CRS CONTRACTS.** This Order is placed in support of a U.S. Government Commercial Resupply Services Contract or subcontract, this Order incorporates, and SELLER shall comply with, the additional terms contained herein:

**A. RIGHTS IN DATA**

BUYER shall obtain from its SELLERS all data and rights therein necessary to fulfill BUYER's obligations to NASA under the CRS2 contract in accordance with the following *Data Rights provision(s)*.

FAR 52.227-14 (May 2014) (Alternate II) (Dec 2007) (Alternate III) (Dec 2007)

(End of Clause)

**B. CROSS-WAIVER OF LIABILITY FOR SPACE STATION ACTIVITIES (NFS 1852.228-76) (OCT 2012) (DEVIATION)**

(a) The Intergovernmental Agreement Among the Government of Canada, Governments of Member States of the European Space Agency, the Government of Japan, the Government of the Russian Federation, and the Government of the United States of America concerning Cooperation on the Civil International Space Station (IGA) for the International Space Station (ISS) contains a cross-waiver of liability provision to encourage participation in the exploration, exploitation, and use of outer space through the ISS. The objective of this clause is to implement the Prime Contract cross-waiver of liability in the interest of encouraging participation in the exploration, exploitation, and use of outer space through the International Space Station (ISS). The Parties intend that the cross-waiver of liability is intended to be broadly construed to achieve this objective.

(b) As used in this clause, the term:

(1) "Agreement" refers to any NASA Space Act agreement or contract that contains the cross-waiver of liability provision authorized by 14 CFR Part 1266.102.

(2) "Damage" means:

- (i) Bodily injury to, or other impairment of health of, or death of, any person;
- (ii) Damage to, loss of, or loss of use of any property;
- (iii) Loss of revenue or profits; or
- (iv) Other direct, indirect, or consequential Damage.

(3) "Launch" means the intentional ignition of the first-stage motor(s) of the Launch Vehicle intended to place or try to place a Launch Vehicle (which may or may not include any Transfer Vehicle or Payload) from Earth:

- (i) in a subBUYER trajectory;
- (ii) in Earth orbit in outer space; or
- (iii) otherwise in outer space,

including activities involved in the preparation of a Launch Vehicle, Transfer Vehicle, or Payload for launch.

(4) "Launch Services" means:

- (i) Activities involved in the preparation of a Launch Vehicle, Transfer Vehicle, or Payload for launch; and
- (ii) The conduct of a Launch.

(5) "Launch Vehicle" means an object, or any part thereof, intended for launch, launched from Earth, or returning to Earth which carries Payloads or persons, or both.

(6) "Partner State" includes each Contracting Party for which the IGA has entered into force, pursuant to Article 25 of the IGA or pursuant to any successor agreement. A Partner State includes its Cooperating Agency. It also includes any entity specified in the Memorandum of Understanding (MOU) between NASA and the Government of Japan to assist the Government of Japan's Cooperating Agency in the implementation of that MOU.

(7) "Party" means a party to an Agreement involving activities in connection with the ISS, including this Subcontract.

(8) "Payload" means all property to be flown or used on or in a Launch Vehicle or the ISS.

(9) "Protected Space Operations" means all Launch or Transfer Vehicle activities, ISS activities, and Payload activities on Earth, in outer space, or in transit between Earth and outer space in implementation of the IGA, MOUs concluded pursuant to the IGA, implementing arrangements, and contracts to perform work in support of NASA's obligations under these agreements. It includes, but is not limited to:

- (i) Research, design, development, test, manufacture, assembly, integration, operation, or use of Launch or Transfer Vehicles, the ISS, Payloads, or instruments, as well as related support equipment and facilities and services; and

- (ii) All activities related to ground support, test, training, simulation, or guidance and control equipment, and related facilities or services. "Protected Space Operations" also includes all activities related to evolution of the ISS, as provided for in Article 14 of the IGA. "Protected Space Operations" excludes activities on Earth which are conducted on return from the ISS to develop further a Payload's product or process for use other than for ISS-related activities in implementation of the IGA.

(10) "Reentry" means to return or attempt to return, purposefully, a Transfer Vehicle or Payload from the ISS, Earth orbit, or outer space to Earth.

(11) "Reentry Services" means:

Activities involved in the preparation of a Transfer Vehicle or Payload for Reentry; and

The conduct of a Reentry.

(12) "Related Entity" means:

- (i) A contractor or SELLER of NASA, SELLER or a Partner State at any tier;

- (ii) A user or customer of NASA, SELLER or a Partner State at any tier; or

- (iii) A contractor or SELLER of a user or customer of NASA, SELLER or a Partner State at any tier.

The terms "contractor" and "SELLER" include suppliers of any kind.

(13) "Transfer Vehicle" means any vehicle that operates in space and transfers Payloads or persons or both between two different space objects, between two different locations on the same space object, or between a space object and the surface of a celestial body. A Transfer Vehicle also includes a vehicle that departs from and returns to the same location on a space object.

(c) Cross-waiver of liability:

(1) The SELLER agrees to a cross-waiver of liability pursuant to which SELLER waives all claims against any of the entities or persons listed in paragraphs (c)(1)(i) through (c)(1)(iv) of this clause based on Damage arising out of Protected Space Operations. This cross-waiver shall apply only if the person, entity, or property causing the Damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations. The cross-waiver shall apply to any claims for Damage, whatever the legal basis for such claims, against:

- (i) A Party as defined in (b)(7) of this clause;

- (ii) A Partner State including the United States of America;
  - (iii) A Related Entity of any entity identified in paragraph (c)(1)(i) or (c)(1)(ii) of this clause; or
  - (iv) The employees of any of the entities identified in paragraphs (c)(1)(i) through (c)(1)(iii) of this clause.
- (2) In addition, the SELLER shall, by contract or otherwise, extend the cross-waiver of liability set forth in paragraph (c)(1) of this clause to its SELLERS at any tier by requiring them, by contract or otherwise, to:
- (i) Waive all claims against the entities or persons identified in paragraphs (c)(1)(i) through (c)(1)(iv) of this clause; and
  - (ii) Require that their SELLERS waive all claims against the entities or persons identified in paragraphs (c)(1)(i) through (c)(1)(iv) of this clause.
- (3) For avoidance of doubt, this cross-waiver of liability includes a cross-waiver of claims arising from the Convention on International Liability for Damage Caused by Space Objects, which entered into force on September 1, 1972, where the person, entity, or property causing the Damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations.
- (4) Notwithstanding the other provisions of this clause, this cross-waiver of liability shall not be applicable to:
- (i) Claims between the SELLER and its own Related Entities or between its Related Entities;
  - (ii) Claims made by a natural person (with the exception of providers of non-NASA cargo), his/her estate, survivors or subrogees (except when a subrogee is a Party to an Agreement or is otherwise bound by the terms of this cross-waiver) for bodily injury to, or other impairment of health of, or death of, such person;
  - (iii) Claims for Damage caused by willful misconduct;
  - (iv) Intellectual property claims;
  - (v) Claims for Damage resulting from a failure of NASA to extend the Prime Contract cross-waiver of liability to its Related Entities;
  - (vi) Claims by a party to the Prime Contract arising out of or relating to the other Party's failure to perform its obligations under that contract.
  - (vii) Claims against providers of non-NASA cargo as outlined in clause II.A.5 of this contract.
- (5) Nothing in this clause shall be construed to create the basis for a claim or suit where none would otherwise exist.
- (6) This clause provides for a reciprocal waiver of claims between BUYER and the SELLER and their Related Entities as described in paragraph (c) above. This reciprocal waiver of claims shall not apply to rights and obligations arising from the application of any of the other clauses in the Subcontract or to rights and obligations arising from activities that are not within the scope of this Subcontract.
- (7) Pursuant to paragraph (c) (2), the SELLER shall extend this waiver of claims to its Related Entities by requiring them, by contract or otherwise, to waive all claims against the Government, BUYER, and their Related Entities. For avoidance of doubt, the SELLER shall require providers of non-NASA cargo (any cargo on an ISS Resupply Mission that is not NASA cargo), to waive claims against the Government, BUYER and their Related Entities; however, the Government does not waive such claims against providers of non-NASA cargo.
- (d) Under the Prime Contract, BUYER is required to obtain a Federal Aviation Administration (FAA) license, in accordance with 51 U.S.C. 50901 et seq., for Launch and Reentry Services. The waivers of claims in this clause shall apply to activities under this Subcontract, except that the waiver of claims between the Government, BUYER and the SELLER under paragraphs (6) and (7) shall not be applicable for phases of Launch Services and Reentry Services that are subject to the FAA license.

(End of clause)

**C. CROSS WAIVERS OF LIABILITY REQUIRED BY COMMERCIAL SPACE LAUNCH ACT**

(a) In accordance with the applicable Department of Transportation commercial launch license requirements, SELLER agrees to a no-fault, no-subrogation, inter-participant waiver of liability pursuant to which each shall not bring a claim against the other, its contractors and subcontractors and the United States Government and its contractors and subcontractors, and each party agrees to be responsible for any Property Damage it incurs or for any Bodily Injury to, or Property Damage incurred by, its own employees resulting from Licensed Activity (as that term is defined in 14 CFR § 440.3), irrespective of whether such Bodily Injury or Property Damage is caused by SELLER, BUYER or by their contractors, subcontractors, officers, directors, agents, servants and employees and the Government and regardless of whether such Bodily Injury or Property Damage arises through negligence or otherwise. This agreement will also include any other provisions required by BUYER's launch license and/or the Commercial Space Transportation Licensing Regulations set forth at 14 CFR § 440.17.

(b) SELLER and BUYER shall each be responsible for such insurance as they deem necessary to protect their respective property. Any insurance carried in accordance with this Article 1.B and any policy taken out in substitution or replacement for any such policy shall provide that the insurers shall waive any rights of subrogation against SELLER, BUYER, and the United States Government, as the case may be, and their contractors and subcontractors at every tier.

(c) SELLER and BUYER hereby agree to obtain a waiver in the form set forth above from any party with which it enters into an agreement relating to the activities contemplated by this Article, including without limitation, all of its respective contractors, subcontractors and suppliers at every tier, and all persons and entities to whom it assigns all or any part of its rights or obligations under this Agreement.

(d) As used herein, "Bodily Injury" means bodily injury, sickness, disease, disability, shock, mental anguish or mental injury sustained by any person including death and damages for care and loss of services resulting therefrom. "Property Damage" means injury to or destruction of tangible property including the loss of use of such injured or destroyed property.

#### **D. IDENTIFICATION AND MARKING OF GOVERNMENT EQUIPMENT (NFS 1852.245-74) (JAN 2011)**

(a) The SELLER shall identify all equipment to be delivered to the Government using NASA Technical Handbook (NASA-HDBK) 6003, Application of Data Matrix Identification Symbols to Aerospace Parts Using Direct Part Marking Methods/Techniques, and NASA Standard (NASA-STD) 6002, Applying Data Matrix Identification Symbols on Aerospace Parts, or through the use of commercial marking techniques that: (1) are sufficiently durable to remain intact through the typical lifespan of the property; and, (2) contain the data and data format required by the standards. This requirement includes deliverable equipment listed in the schedule and other equipment when no longer required for contract performance and NASA directs physical transfer to NASA or a third party. The SELLER shall identify property in both machine and human readable form unless the use of a machine readable-only format is approved by the NASA Industrial Property Officer.

(b) Equipment shall be marked in a location that will be human readable, without disassembly or movement of the equipment, when the items are placed in service unless such placement would have a deleterious effect on safety or on the item's operation.

(c) Concurrent with equipment delivery or transfer, the SELLER shall provide the following data in an electronic spreadsheet format:

- (1) Item Description.
- (2) Unique Identification Number (License Tag).
- (3) Unit Price.
- (4) An explanation of the data used to make the unique identification number.

(d) For equipment no longer needed for contract performance and physically transferred under paragraph (a) of this clause, the following additional data is required:

- (1) Date originally placed in service.
- (2) Item condition.

(e) The data required in paragraphs (c) and (d) of this clause shall be delivered to the NASA center receiving activity listed below:

NASA/Johnson Space Center  
Central Receiving/Bldg 420  
2101 NASA Parkway  
Houston, TX 77058

(f) The SELLER shall include the substance of this clause, including this paragraph (f), in all sub-tier subcontracts that require delivery of equipment.

(End of clause)

**E. EXPORT LICENSES (NFS 1852.225-70 (FEB 2000))**

- (a) The SELLER shall comply with all United States (U.S.) export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the SELLER shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance.
- (b) The SELLER shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any NASA Center, where the foreign person will have access to export-controlled technical data or software.
- (c) The SELLER shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.
- (d) The SELLER shall be responsible for ensuring that the provisions of this clause apply to its sub-tier subcontractors.

(End of clause)

**F. SUBCONTRACTING WITH RUSSIAN ENTITIES FOR GOODS OR SERVICES**

(a) Definitions: In this clause:

(1) The term "Russian entities" means:

- (i) Russian persons, or
- (ii) Entities created under Russian law or owned, in whole or in part, by Russian persons or companies including, but not limited to, the following:

- (A) The Russian Federal Space Agency (Roscosmos),
- (B) Any organization or entity under the jurisdiction or control of Roscosmos, or
- (C) Any other organization, entity or element of the Government of the Russian Federation.

(2) The term "extraordinary payments" means payments in cash or in kind made or to be made by the United States Government prior to December 31, 2020, 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 reporting requirement in section 6(i) of the Iran, North Korea, and Syria Nonproliferation Act, as amended (INKSNA). This clause also implements section 6(a) and the exception in section 7(1)(B) of INKSNA that is applicable through December 31, 2020. NASA has applied the restrictions in INKSNA to include funding of Russian entities via U.S. Contractors.

(c) (1) The SELLER shall not subcontract with Russian entities without first receiving written approval from BUYER. In order to obtain this written approval to subcontract with any Russian entity as defined in paragraphs (a), the SELLER shall provide

BUYER 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):

(i) 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 be made under the subcontract.

(ii) The SELLER shall provide certification that the subcontracting entity is not, at the date of the subcontract approval request, on any of the lists of proscribed denied parties, specially designated nationals and entities of concern found at: BIS's Listing of Entities of Concern (see <http://www.access.gpo.gov/bis/ear/pdf/744spir.pdf>)

BIS's List of Denied Parties (see <http://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/denied-persons-list>)

OFAC's List of Specially Designated Nationals (Adobe® PDF format) (see <http://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/unverified-list>)

List of Unverified Persons in Foreign Countries (see <http://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/unverified-list>)

State Department's List of Parties Statutorily Debarred for Arms Export Control Act Convictions (see <http://pmddtc.state.gov/compliance/debar.html>)

State Department's Lists of Proliferating Entities (see <http://www.state.gov/t/isn/c15231.htm>)

(2) Unless relief is granted by the BUYER, the information necessary to obtain approval to subcontract shall be provided BUYER forty five (45) business days prior to executing any planned subcontract with entities defined in paragraph (a).

(d) After receiving approval to subcontract, the SELLER shall provide BUYER with a report every six (6) months that documents the individual payments made to an entity in paragraph (a). The reports are due to BUYER on July 5th and January 5th. The July 5th report shall document all of the individual payments made from the previous January through June. The January 5th report shall document all of the individual payments made from the previous July through December. The content of the report shall provide the following information for each time a payment is made to an entity in paragraph (a):

- (1) The name of the entity,
- (2) The subcontract number,
- (3) The amount of the payment,
- (4) The date of the payment.

(e) BUYER may direct the SELLER to provide additional information for any other prospective or existing subcontract at any tier. BUYER may direct the SELLER to terminate for the convenience of the Government any subcontract at any tier with an entity defined in paragraph (a), subject to an equitable adjustment.

(f) All work subcontracted to the Russian Federal Space Agency, any organization or entity under the jurisdiction or control of the Russian Federal Space Agency, or any other organization, entity or element of the Government of the Russian Federation must be completed on or before December 31, 2020. Any subcontract with entities defined in paragraph (a), therefore, shall be completed in sufficient time to permit the U.S. Government (through BUYER) to make extraordinary payments on subcontracts with Russian entities on or before December 31, 2020. (g) The SELLER shall include the substance of this clause in all its subcontracts, and shall require such inclusion in all other subcontracts of any tier. The SELLER shall be responsible to obtain written approval from BUYER to enter into any tier subcontract that involves entities defined in paragraph (a).

(h) Performance of this contract after December 31, 2020 may be subject to prohibitions on payments to Russian entities under INKSNA.

(End of Clause)

#### G. HIGHER LEVEL CONTRACT QUALITY REQUIREMENT (FAR 52.246-11) (FEB 1999)

The SELLER shall comply with the higher-level quality standard selected below.

	<i>Number</i>	<i>Title</i>	<i>Revision</i>	<i>Applicability</i>
<b>X</b>	AS9100	SAE Aerospace Quality Management System	Latest	Compliance Required

(End of Clause)

#### H. FEDERAL ACQUISITION REGULATION AND NASA FAR SUPPLEMENT CLAUSES

The following clauses from the FAR and NFS are hereby incorporated by reference, with the same force and effect as if they were given in full text and are applicable. If the date or substance of any of the clauses listed below is different from the date or substance of the clause actually incorporated in the Prime Contract, the date or substance of the clause incorporated by the Prime Contract shall apply instead.

##### FAR Clauses

<b>52.212-5</b>	<b>Contract Terms and Conditions Required to Implement Statutes or Executive Orders</b>
52.203-6	Restrictions on Subcontract Sales to the Government Alternate I
52.203-13	Contractor Code of Business Ethics and Conduct
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards
52.204-15	Service Contract Reporting Requirements for Indefinite-Delivery Contracts
52.209-6	Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment
52.219-8	Utilization of Small Business Concerns
52.222-17	Nondisplacement of Qualified Workers
52.222-21	Prohibition on Segregated Facilities
52.222-26	Equal Opportunity
52.222-35	Equal Opportunity for Veterans
52.222-36	Equal Opportunity for Workers with Disabilities
52.222-37	Employment Reports on Veterans
52.222-40	Notification of Employee Rights Under the National Labor Relations Act
52.222-41	Service Contract Labor Standards
52.222-50	Combating Trafficking in Persons



52.222-51	Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment - Requirements
52.222-53	Exemption from Application of the Service Contract Act to Contracts for Certain Services - Requirements
52.222-54	Employment Eligibility Verification
52.223-18	Encouraging Contractor Policies to Ban Text Messaging While Driving
52.225-13	Restrictions on Certain Foreign Purchases
52.225-26	Contractors Performing Private Security Functions Outside the United States
52.226-6	Promoting Excess Food Donation to Nonprofit Organizations
52.227-14	Rights in Data - General
52.246-11	Higher Level Quality Requirements
52.247-64	Preference for Privately Owned U.S. -Flag Commercial Vessels
<b>52.252-2</b>	<b>Clauses Incorporated By Reference</b>
52.203-17	Contractor Employee Whistleblower Rights and Requirement to Inform Employees of Whistleblower Rights
52.204-9	Personal Identity Verification of Contractor Personnel
52.232-40	Providing Accelerated Payments to Small Business Subcontractors
52.245-1	Government Property Alternate I
52.246-4	Inspection of Services - Fixed Price

**NASA FAR Supplement Clauses**

1852.204-76	Security Requirements for Unclassified Information Technology Resources
1852.223-70	Safety and Health
1852.225-70	Export Licenses
1852.228-76	Cross-Waiver of Liability for Space Station Activities
1852.237-72	Access to Sensitive Information
1852.237-73	Release of Sensitive Information



1852.245-74	Identification and Marking of Government Equipment (Deviation)
1852.245-76	List of Government-Furnished Property Pursuant to FAR 52.245-1
1852.245-78	Physical Inventory of Capital Personal Property

**I. FAR 52.212-4 CONTRACT TERMS AND CONDITIONS – COMMERCIAL ITEMS**

In addition to the above required flow downs, the following provisions and clauses listed in FAR 52.212-4 – Contract Terms and Conditions – Commercial Items should be included:

- Inspection and Acceptance
- Assignment
- Changes
- Disputes
- Definitions
- Excusable Delays
- Invoice
- Patent Indemnity
- Payment
- Risk of Loss
- Taxes
- Termination for BUYER's Convenience
- Termination for Cause
- Title
- Warranty
- Limitation of Liability
- Compliance With Federal, State and Local Laws
- Compliance To Laws Unique to Government Contracts
- Order of Precedence

(End of Clause)

**J. OTHER APPLICABLE TERMS****(a) Notification of Employee Rights Supplement**



29 CFR Part 471, Appendix A, Subpart A – Notification of Employee Rights Under Federal Labor Laws is included in the terms of this Order.

**NORTHROP GRUMMAN INNOVATION SYSTEMS  
ADDENDUM TO USE WITH TERMS CTM-P-ST-002 FOR  
FIRM FIXED-PRICE ORDERS IN SUPPORT OF THE CRS PROGRAM**  
*Prime Contract N*

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**(b) Indemnification for Defective Pricing and Violation of the Anti-Kickback Statute or the Procurement Integrity Act**

The SELLER, its Subcontractors, agents, and/or employees agree to indemnify and save harmless and defend Buyer from and against any and all fines, penalties, offsets, claims, demands, actions, debts, liabilities, judgments, costs and attorney's fees, costs and profit disallowed or reduced by Buyer's customer arising out of claims on account of, or in any manner predicated upon (1) submission by SELLER, its Subcontractors, agents and/or employees of alleged or confirmed defective pricing data or (2) violation of the Anti-Kickback Act of 1986 (41 U.S.C. Section 51-58) by SELLER or any of its suppliers or subcontractors, including indirect suppliers (such as a supplier to one of SELLER's direct suppliers) or (3) any other government or contractual requirement for cost or pricing data submitted by the SELLER, its Subcontractors, agents and/or employees to Buyer or any other party.

**(c) Certifications and Representations**

By entering into this Order, SELLER confirms that it has completed BUYER's Supplemental Representations and Certifications form and that SELLER's completed form is included in this Order (including, without limitation, Buyer's Commercial Item Determination Form, if applicable). SELLER acknowledges that Buyer has relied upon SELLER's certifications and representations contained herein and in any written offer, proposal or quote, or periodic submission. By entering into an Order, SELLER republishes the certifications and representations submitted with its written offer, including any periodic submission to Buyer, and oral offers/quotations made at the request of Buyer, and SELLER makes those certifications and representations set forth in the FAR clauses referenced above. SELLER shall immediately notify Buyer of any change of status regarding any certification or representation.