

GRANT AGREEMENTS

The following provisions of a CASIS' Grant Agreement may not be altered or removed:

1. Article 11 - Rights in Data [2 C.F.R. pt. 1800, app'x B § 1800.909].

(a) "Data," as used in this term and condition, means recorded information, regardless of form, the media on which it may be recorded, or the method of recording. The term includes, but is not limited to, data of a scientific or technical nature, and any copyrightable work, including computer software and documentation thereof.

(b) As to data first produced by recipient in carrying out recipient's responsibilities under this award in which the recipient asserts copyright, or data for which copyright ownership was acquired under the grant, the recipient grants to the Federal Government (Government), a royalty-free, nonexclusive and irrevocable license to use, reproduce, distribute (including distribution by transmission) to the public, perform publicly, prepare derivative works, and display publicly, data in whole or in part and in any manner for Federal purposes and to have or permit others to do so for Federal purposes only.

(c) In order that the Government may exercise its license rights in data created under the Cooperative Agreement between CASIS and NASA, the Government, upon request to CASIS, shall have the right to review and/or obtain delivery of data resulting from the performance of CASIS's work under the Cooperative Agreement, and authorize others to receive such data to use for Federal purposes. Notwithstanding the foregoing, data generated by Grantee under this Agreement are not subject to this part (c) of this Section.

(d) ***Cost Sharing and/or Matching Efforts.*** When the recipient cost shares with the Government on the effort, the following paragraph also applies -

"(1) In the event data first produced by the recipient in carrying out recipient's responsibilities under this award is furnished to NASA, and recipient considers such data to embody trade secrets or to comprise commercial or financial information which is privileged or confidential, and such data is so identified with a suitable notice or legend, the data will be maintained in confidence and disclosed and used by the Government and its contractors (under suitable protective conditions) only for experimental, evaluation, research and development purposes, by or on behalf of the Government for an agreed to period of time, and thereafter for Federal purposes as defined in § 1800.909(b)."

2. Article 12 - Patent Rights. [2 C.F.R. pt. 1800, app'x B § 1800.908]. [**Applicable to Small Business or Non-Profit Organization**]

(a) ***Definitions.***

CASIS MANDATORY FLOW-DOWN CLAUSES

- (i) “Invention” means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. § 2321 et seq.).
 - (ii) “Subject invention” means any invention of Grantee conceived or first actually reduced to practice in the performance of work under this Agreement, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. § 2401(d)) must also occur during the period of performance.
 - (iii) “Practical Application” means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or government regulations, available to the public on reasonable terms.
 - (iv) “Made” when used in relation to any invention means the conception or first actual reduction to practice of such invention.
 - (v) “Small Business Firm” means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. § 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this Section, the size standards for small business concerns involved in government procurement and subcontracting at 13 C.F.R § 121.3-8 and 13 C.F.R § 121.3-12, respectively, will be used.
 - (vi) “Nonprofit Organization” means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. § 501(c) and exempt from taxation under section 501(a) of the Internal Revenue Code (25 U.S.C. § 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.
- (b) ***Allocation of Principal Rights.*** Grantee may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this Section and 35 U.S.C. 203. With respect to any subject invention in which Grantee retains title, the Federal government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.
- (c) ***Invention Disclosure, Election of Title and Filing of Patent Application by Grantee.***

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- (i) Grantee will disclose each subject invention to NASA and CASIS within two months after the inventor discloses it in writing to Grantee personnel responsible for patent matters. The disclosure to NASA and CASIS shall be in the form of a written report and shall identify the agreement under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to NASA, Grantee will promptly notify NASA and CASIS of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by Grantee.
- (ii) Grantee will elect in writing whether or not to retain title to any such invention by notifying NASA and CASIS within two years of disclosure to NASA and CASIS. However, in any case where publication, on sale or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by NASA to a date that is no more than 60 days prior to the end of the statutory period.
- (iii) Grantee will file its initial patent application on a subject invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. Grantee will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application or six months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.
- (iv) Requests for extension of the time for disclosure, election, and filing under parts (c)(i)–(iii) of this Section may, at the discretion of NASA, be granted.
- (v) The recipient may use whatever format is convenient to disclose subject invention required in subparagraph (c)(i). NASA prefers that the recipient use either the electronic or paper version of NASA Form 1679, Disclosure of New Technology (Including Software), to disclose subject invention. Both the electronic and paper version of the NASA Form 1679 may be accessed at the electronic New Technology Reporting web site <https://invention.nasa.gov>.
- (vi) In addition to the above, the recipient shall provide the New Technology Representative, as designated under part (o)(i) of this Section, the following: (1) A yearly interim new technology summary report listing any subject inventions required to be disclosed during the preceding year (or a statement certifying there were none) for the entire grant period; which report shall be submitted within 90 days after the end date for the period of performance within the designated system noted within the award document.

- (d) ***Conditions When the Government May Obtain Title.*** Grantee will convey to NASA, upon written request, title to any subject invention—
- (i) If Grantee fails to disclose or elect title to the subject invention within the times specified in part (c) of this Section, above, or elects not to retain title; provided that NASA may only request title within 60 days after learning of the failure of Grantee to disclose or elect within the specified times.
 - (ii) In those countries in which Grantee fails to file patent applications within the times specified in part (c) of this Section, above; provided, however, that if Grantee has filed a patent application in a country after the times specified in part (c) of this Section, above, but prior to its receipt of the written request of NASA, Grantee shall continue to retain title in that country.
 - (iii) In any country in which Grantee decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.
- (e) ***Minimum Rights to Grantee and Protection of Grantee Right to File.***
- (i) Grantee will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if Grantee fails to disclose the invention within the times specified in part (c) of this Section, above. Grantee's license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which Grantee is a party and includes the right to grant sublicenses of the same scope to the extent Grantee was legally obligated to do so at the time the grant was awarded. The license is transferable only with the approval of NASA except when transferred to the successor of that party of Grantee's business to which the invention pertains.
 - (ii) Grantee's domestic license may be revoked or modified by NASA to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 C.F.R. part 404 and agency licensing regulations (if any). This license will not be revoked in that field of use or the geographical areas in which Grantee has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of NASA to the extent Grantee, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
 - (iii) Before revocation or modification of the license, NASA will furnish Grantee a written notice of its intention to revoke or modify the license, and Grantee will be allowed thirty days (or such other time as may be authorized by NASA for good cause shown by Grantee) after the notice to show cause why the license should not be revoked or modified. Grantee has the right to appeal, in accordance with applicable regulations in 37 C.F.R. part 404 and agency regulations (if any) concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of the license.

- (f) ***Grantee Action to Protect the Government's Interest.***
- (i) Grantee agrees to execute or to have executed and promptly deliver to NASA all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which Grantee elects to retain title, (ii) convey title to NASA when requested under part (d) of this Section and to enable the government to obtain patent protection throughout the world in that subject invention; and, the recipient shall through employee agreements or other suitable recipient policy, require that its employees “will assign and do hereby assign” to the recipient all right, title and interest in any subject invention under this award.”
 - (ii) Grantee agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by Grantee each subject invention made under this Agreement in order that Grantee can comply with the disclosure provisions of part (c) of this Section, above, and to execute all papers necessary to file patent applications on subject inventions and to establish the government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by part (c)(i), above. Grantee shall instruct such employees through employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.
 - (iii) Grantee will notify NASA of any decisions not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than thirty days before the expiration of the response period required by the relevant patent office.
 - (iv) Grantee agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement, “This invention was made with government support under (identify the Agreement) awarded by CASIS under a Cooperative Agreement with NASA. The government has certain rights in the invention.”
- (g) ***Subcontracts (including purchase orders per 2 CFR part 200).***
- (i) Grantee will include this Section, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental or research work to be performed by a small business firm or domestic nonprofit organization. The subcontractor will retain all rights provided for Grantee in this Section, and Grantee will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.
 - (ii) Grantee will include the clause at 2 C.F.R § 1800.923, New Technology, in all other subcontracts, regardless of tier, with other than a small business firm or a nonprofit organization if a purpose of the subcontract is the performance of experimental, developmental, research, design, or engineering work..

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- (iii) In the case of subcontracts, at any tier, when the prime award with the Federal agency was a contract (but not a grant or cooperative agreement), the agency, subcontractor, and contractor agree that the mutual obligations of the parties created by this Section constitute a contract between the subcontractor and the Federal agency with respect to the matters covered by the Section; provided, however, that nothing in this Section is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under part (j) of this Section.

(h) **Reporting on Utilization of Subject Inventions.** Grantee agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by Grantee or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by Grantee, and such other data and information as CASIS or NASA may reasonably specify. Grantee also agrees to provide additional reports as may be requested by NASA in connection with any march-in proceeding undertaken by NASA in accordance with part (j) of this Section. As required by 35 U.S.C. § 202(c)(5), NASA agrees it will not disclose such information to persons outside the government without permission of Grantee.

(i) **Preference for United States Industry.** Notwithstanding any other provision of this Section, Grantee agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject inventions in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by NASA upon a showing by Grantee or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) **March-in Rights.** Grantee agrees that with respect to any subject invention in which it has acquired title, NASA has the right in accordance with the procedures in 37 C.F.R. § 401.6 and any supplemental regulations of NASA to require Grantee, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if Grantee, assignee, or exclusive licensee refuses such a request NASA has the right to grant such a license itself if NASA determines that:

- (i) Such action is necessary because Grantee or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use.
- (ii) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by Grantee, assignee or their licensees;
- (iii) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by Grantee, assignee or licensees; or

- (iv) Such action is necessary because the agreement required by part (i) of this Section has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.
- (k) ***Special Provisions for Agreements with Nonprofit Organizations.*** If Grantee is a nonprofit organization, it agrees that:
- (i) Rights to a subject invention in the United States may not be assigned without the approval of NASA, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as Grantee;
 - (ii) Grantee will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when NASA deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. § 202(e) and 37 C.F.R. § 401.10;
 - (iii) The balance of any royalties or income earned by Grantee with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific research or education; and
 - (iv) It will make efforts that are reasonable under the circumstances to attract licensees of subject invention that are small business firms and that it will give a preference to a small business firm when licensing a subject invention if Grantee determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that Grantee is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of Grantee. However, Grantee agrees that the Secretary may review Grantee's licensing program and decisions regarding small business applicants, and Grantee will negotiate changes to its licensing policies, procedures, or practices with the Secretary when the Secretary's review discloses that Grantee could take reasonable steps to implement more effectively the requirements of this part (k) of this Section.

(l) **Communications.** A copy of all submissions or requests required by this Section, plus a copy of any reports, manuscripts, publications or similar material bearing on patent matters, shall be sent to the CASIS Administrative Point of Contact, the NASA Patent Counsel, and the NASA Grant Officer in addition to any other submission requirements in the Agreement provisions (e.g. as specified in this terms and condition, including part (o)(i) of this Section). If any reports contain information describing a “subject invention” for which Grantee has elected or may elect to retain title, NASA will use reasonable efforts to delay public release by NASA or publication by NASA in a NASA technical series until an application filing date has been established, provided that Grantee identify the information and the “subject invention” to which it relates at the time of submittal. If required by the Patent Representative or requested by the New Technology Representative, as designated under part (o)(i) of this Section, the Grantee shall provide the filing date, serial number and title, a copy of the patent application, and a patent number and issue date for any “subject invention” in any country in which Grantee has applied for patents. Additionally, NASA shall have an irrevocable power to inspect and make copies of the patent application file, when a Federal Government employee is a co-inventor.

(m) **NASA Inventions.** NASA will use reasonable efforts to report inventions made by NASA employees as a consequence of, or which bear a direct relation to, the performance of specified NASA activities under this agreement and, upon timely request, will use reasonable efforts to grant the recipient an exclusive, or partially exclusive, revocable, royalty-bearing license, subject to the retention of a royalty-free right of the Government to practice or have practiced the invention by or on behalf of the Government.

(n) The recipient agrees, subject to (n)(i) below, that the Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this term and condition.

- (i) Publishing information concerning an invention before a patent application is filed on a subject invention may create a bar to a valid patent. To avoid this bar, agencies may withhold information from the public that discloses any invention in which the Government owns or may own a right, title, or interest (including a nonexclusive license) (see 35 U.S.C. 205 and 37 CFR part 401). Agencies may only withhold information concerning inventions for a reasonable time in order for a patent application to be filed. Once filed in any patent office, agencies are not required to release copies of any document that is a part of a patent application for those subject inventions.
- (ii) In the event NASA contractors are tasked to perform work in support of specified activities under a cooperative agreement and inventions are made by contractor employees, the contractor will normally retain title to its employee inventions in accordance with 35 U.S.C. 202, 14 CFR part 1245, and/or Executive Order 12591. In the event the contractor decides not to pursue rights to title in any such invention and NASA obtains or retains title to such inventions, NASA will use reasonable efforts to report such inventions and, upon timely request, will use reasonable efforts to grant the recipient an exclusive, or partially exclusive, revocable, royalty-bearing license, subject to the retention of a royalty-free right of the Government to practice or have practiced the invention by or on behalf of the Government.

(o) **Designation of New Technology Representative and Patent Representative** (1800.924)

- (i) For purposes of administration of this term and condition, the following named representatives are hereby designated by the Grant Officer to administer such term and condition:
 - (A) New Technology Representatives: Connie Sartor, connie.j.sartor@nasa.gov and Kathy Acuna, kathryn.y.acuna@nasa.gov
 - (B) Patent Representative: Ed Fein, edward.k.fein@nasa.gov
- (ii) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by this term and condition, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative, with notification to the Grant Officer, unless transmitted in response to correspondence or request from the Patent Representative. Inquires or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subaward/subcontract hereunder requiring a “Patent Rights - Retention by the Contractor (Short Form)” term and condition unless otherwise authorized or directed by the Grant Officer. The respective responsibilities and authorities of the above named representatives are set forth in the Grants and Cooperative Agreement Manual.

3. Article 13 - New Technology. [2 C.F.R. 1800.923]. [**Applicable to Entity Other than Small Business or Non-Profit Organization**]

Prescription— The Grant Officer shall include this term and condition in all grants with commercial firms other than those with small businesses. This term and condition is used in lieu of the term and condition at 2 CFR 1800.908, Patent Rights.

(a) ***Definitions.***

- (i) Administrator, as used in this term and condition, means the Administrator of the National Aeronautics and Space Administration (NASA) or duly authorized representative.
- (ii) The term “award,” as used in this term and condition, means any actual or proposed grant, cooperative agreement, understanding, or other arrangement, and includes any assignment, substitution of parties, subaward, or subcontract executed or entered into thereunder.
- (iii) Made, as used in this term and condition, means conception or first actual reduction to practice; provided, that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of performance.

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- (iv) Nonprofit organization, as used in this term and condition, means a domestic university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)), or any domestic nonprofit scientific or educational organization qualified under a State nonprofit organization statute.
 - (v) Practical application, as used in this term and condition, means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.
 - (vi) Reportable item, as used in this term and condition, means any invention, discovery, improvement, or innovation of the awardee, whether or not patentable or otherwise protectable under Title 35 of the United States Code, made in the performance of any work under any NASA award or in the performance of any work that is reimbursable under any term and condition in any NASA award providing for reimbursement of costs incurred before the effective date of the award. Reportable items include, but are not limited to, new processes, machines, manufactures, and compositions of matter, and improvements to, or new applications of, existing processes, machines, manufactures, and compositions of matter. Reportable items also include new computer programs, and improvements to, or new applications of, existing computer programs, whether or not copyrightable or otherwise protectable under Title 17 of the United States Code.
 - (vii) Small business firm, as used in this term and condition, means a domestic small business concern as defined at 15 U.S.C. 632 and implementing regulations (see 13 CFR 121.401 *et seq.*) of the Administrator of the Small Business Administration.
 - (viii) Subject invention, as used in this term and condition, means any reportable item which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 *et seq.*).
- (b) ***Allocation of principal rights.***
- (i) Presumption of title.
 - (A) Any reportable item that the Administrator considers to be a subject invention shall be presumed to have been made in the manner specified in paragraph (A) or (B) of section 20135(b)(1) of the National Aeronautics and Space Act of 1958 (51 U.S.C. 20135) (hereinafter called “the Act”), and that presumption shall be conclusive unless at the time of reporting the reportable item the recipient submits to the Grant Officer a written statement, containing supporting details, demonstrating that the reportable item was not made in the manner specified in paragraph (A) or (B) of section 20135(b)(1) of the Act.

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- (B) Regardless of whether title to a given subject invention would otherwise be subject to an advance waiver or is the subject of a petition for waiver, the recipient may nevertheless file the statement described in paragraph (b)(i)(A) of this term and condition. The Administrator will review the information furnished by the recipient in any such statement and any other available information relating to the circumstances surrounding the making of the subject invention and will notify the recipient whether the Administrator has determined that the subject invention was made in the manner specified in paragraph (A) or (B) of section 20135(b)(1) of the Act.
- (ii) Property rights in subject inventions. Each subject invention for which the presumption of paragraph (b)(i)(A) of this term and condition is conclusive or for which there has been a determination that it was made in the manner specified in paragraph (A) or (B) of section 20135(b)(1) of the Act shall be the exclusive property of the United States as represented by NASA unless the Administrator waives all or any part of the rights of the United States, as provided in paragraph (b)(iii) of this term and condition.
- (iii) Waiver of rights.
 - (A) Section 20135(g) of the Act provides for the promulgation of regulations by which the Administrator may waive the rights of the United States with respect to any invention or class of inventions made or that may be made under conditions specified in paragraph (A) or (B) of section 20135(b)(1) of the Act.
 - (B) As provided in 14 CFR part 1245, subpart 1, recipients may petition, either prior to execution of the award or within 30 days after execution of the award, for advance waiver of rights to any or all of the inventions that may be made under an award. If such a petition is not submitted, or if after submission it is denied, the recipient (or an employee inventor of the recipient) may petition for waiver of rights to an identified subject invention within eight months of first disclosure of the invention in accordance with paragraph (e)(ii) of this term and condition, or within such longer period as may be authorized in accordance with 14 CFR 1245.105.
- (c) ***Minimum rights reserved by the Government.***
 - (i) With respect to each subject invention for which a waiver of rights is applicable in accordance with 14 CFR part 1245, subpart 1, the Government reserves—
 - (A) An irrevocable, nonexclusive, nontransferable, royalty-free license for the practice of such invention throughout the world by or on behalf of the United States or any foreign government in accordance with any treaty or agreement with the United States; and
 - (B) Such other rights as stated in 14 CFR 1245.107.
 - (ii) Nothing contained in this paragraph (c) shall be considered to grant to the Government any rights with respect to any invention other than a subject invention.
- (d) ***Minimum rights to the Recipient.***

- (i) The recipient is hereby granted a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a subject invention and any resulting patent in which the Government acquires title, unless the recipient fails to disclose the subject invention within the times specified in paragraph (e)(ii) of this term and condition. The recipient's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the recipient is a party and includes the right to grant sublicenses of the same scope to the extent the recipient was legally obligated to do so at the time the award was issued. The license is transferable only with the approval of the Administrator except when transferred to the successor of that part of the recipient's business to which the invention pertains.
 - (ii) The recipient's domestic license may be revoked or modified by the Administrator to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with 37 CFR part 404, Licensing of Government Owned Inventions. This license will not be revoked in that field of use or the geographical areas in which the recipient has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of the Administrator to the extent the recipient, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
 - (iii) Before revocation or modification of the license, the recipient will be provided a written notice of the Administrator's intention to revoke or modify the license, and the recipient will be allowed 30 days (or such other time as may be authorized by the Administrator for good cause shown by the recipient) after the notice to show cause why the license should not be revoked or modified. The recipient has the right to appeal to the Administrator any decision concerning the revocation or modification of its license.
- (e) ***Invention identification, disclosures, and reports.***
- (i) The recipient shall establish and maintain active and effective procedures to assure that reportable items are promptly identified and disclosed to recipient personnel responsible for the administration of this New Technology term and condition within six months of conception and/or first actual reduction to practice, whichever occurs first in the performance of work under this award. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other records as are reasonably necessary to document the conception and/or the first actual reduction to practice of the reportable items, and records that show that the procedures for identifying and disclosing reportable items are followed. Upon request, the recipient shall furnish the Grant Officer a description of such procedures for evaluation and for determination as to their effectiveness.

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- (ii) The recipient will disclose each reportable item to CASIS and the New Technology Representative, with notice to the Grant Officer, within two months after the inventor discloses it in writing to recipient personnel responsible for the administration of this New Technology term and condition or, if earlier, within six months after the recipient becomes aware that a reportable item has been made, but in any event for subject inventions before any on sale, public use, or publication of such invention known to the recipient. The disclosure to the agency shall be in the form of a written report and shall identify the award under which the reportable item was made and the inventor(s) or innovator(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the reportable item. The disclosure shall also identify any publication, on sale, or public use of any subject invention and whether a manuscript describing such invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the agency, the recipient will promptly notify the agency of the acceptance of any manuscript describing a subject invention for publication or of any on sale or public use planned by the recipient for such invention.
- (iii) The recipient shall furnish CASIS and the New Technology Representative, with notice to the Grants Officer, the following:
 - (A) Interim new technology summary reports every 12 months from the date of the award, listing reportable items during that period, and certifying that all reportable items have been disclosed (or that there are no such inventions) and that the procedures required by paragraph (e)(i) of this term and condition have been followed.
 - (B) A final new technology summary report within 90 days after the end of the period of performance, listing all reportable items or certifying that there were no such reportable items, and listing all research subawardees/subcontractors at any tier containing a patent rights clause or certifying that there were no such subcontractors.
- (iv) The recipient agrees, upon written request of the Patent Representative, to furnish additional technical and other information available to the recipient as is necessary for the preparation of a patent application on a subject invention and for the prosecution of the patent application, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions.
- (v) The recipient agrees, subject to (v)(A) below, the Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this term and condition.

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- (A) Publishing information concerning an invention before a patent application is filed on a subject invention may create a bar to a valid patent. To avoid this bar, agencies may withhold information from the public that discloses any invention in which the Government owns or may own a right, title, or interest (including a nonexclusive license) (see 35 U.S.C. 205 and 37 CFR part 401). Agencies may only withhold information concerning inventions for a reasonable time in order for a patent application to be filed. Once filed in any patent office, agencies are not required to release copies of any document that is a part of a patent application for those subject inventions.
- (f) *Examination of records relating to inventions.*
- (i) The Grant Officer or any authorized representative shall, until 3 years after final payment under this award, have the right to examine any books (including laboratory notebooks), records, and documents of the recipient relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this award to determine whether—
- (A) Any such inventions are subject inventions;
- (B) The recipient has established and maintained the procedures required by paragraph (e)(i) of this term and condition; and
- (C) The recipient and its inventors have complied with the procedures.
- (ii) If the New Technology Representative or Patent Representative learns of an unreported recipient invention, the recipient may be required to disclose the invention to the agency for a determination of ownership rights.
- (iii) Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.
- (g) *Subawards/Subcontracts.*
- (i) Unless otherwise authorized or directed by the Grant Officer, the recipient shall—
- (A) Include the clause at NASA FAR Supplement (NFS) 1852.227-70, New Technology, (suitably modified to identify the parties) in any subaward/subcontract hereunder (regardless of tier) with other than a small business firm or nonprofit organization for the performance of experimental, developmental, or research work; and
- (B) Include the FAR clause 52.227-11, as modified by the NASA FAR Supplement (NFS) 1852.227-11, “Patent Right-Retention by the Contractor (Short Form)” (suitably modified to identify the parties) in any subaward/subcontract hereunder (regardless of tier) with a small business firm or nonprofit organization for the performance of experimental, developmental, or research work.
- (ii) In the event of a refusal by a prospective subrecipient to accept such a clause the recipient—

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- (A) Shall promptly submit a written notice to the Grant Officer setting forth the subrecipient's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and
- (B) Shall not proceed with such subaward/subcontract without the written authorization of the Grant Officer.
- (iii) The recipient shall promptly notify the Grant Officer in writing upon the award of any subaward/subcontract at any tier containing a patent rights clause by identifying the subrecipient, the applicable patent rights term and condition/clause, the work to be performed under the subrecipient and the dates of award and estimated completion. Upon request of the Grant Officer, the recipient shall furnish a copy of such subaward/subcontract, and, no more frequently than annually, a listing of the subawards/subcontracts that have been awarded.
- (iv) The subrecipient will retain all rights provided for the recipient in paragraph (g)(i)(A) or (B) of this term and condition, whichever is included in the subaward/subcontracts, and the recipient will not, as part of the consideration for awarding the subaward/subcontract, obtain rights in the subrecipient's subject inventions.

(h) ***Preference for United States industry.*** Unless provided otherwise, no recipient that receives title to any subject invention and no assignee of any such recipient shall grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement may be waived by the Administrator upon a showing by the recipient or assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(i) ***Designation of New Technology Representative and Patent Representative*** (1800.924)

- (i) For purposes of administration of this term and condition, the following named representatives are hereby designated by the Grant Officer to administer such term and condition:
 - (A) New Technology Representatives: Connie Sartor, connie.j.sartor@nasa.gov and Kathy Acuna, kathryn.y.acuna@nasa.gov
 - (B) Patent Representative: Ed Fein, edward.k.fein@nasa.gov

- (ii) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by this term and condition, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative, with notification to the Grant Officer, unless transmitted in response to correspondence or request from the Patent Representative. Inquires or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subaward/subcontract hereunder requiring a “New Technology” term and condition unless otherwise authorized or directed by the Grant Officer. The respective responsibilities and authorities of the above named representatives are set forth in the Grants and Cooperative Agreement Manual.

4. Article 14 - Access to Research Results. [2 C.F.R. pt. 1800, App’x B § 1800.930].

(a) This Agreement is subject to the requirements of the, “NASA Plan: Increasing Access to the Results of Scientific Research,” which covers public access to digital scientific data and peer-reviewed publications.

(b) “Final Peer-Reviewed Manuscript” means the final text version of a peer-reviewed article disclosing the results of scientific research which is authored or co-authored by Grantee or funded, in whole or in part, with funds from this Agreement, that includes all modifications from the publishing peer review process, and all graphics and supplemental material prepared by Grantee.

(c) Grantee shall:

- (i) Ensure that any Final Peer-Reviewed Manuscript is submitted to the NASA-designated repository, currently the PubMed Central system at <http://www.ncbi.nlm.nih.gov/pmc/>. CASIS will provide instructions for completing the submission process in the event Grantee anticipates the creation of a Final Peer-Reviewed Manuscript. Grantee must also ensure that the Final Peer-Reviewed Manuscript is submitted to PubMed Central within one year of completion of the peer review process.
- (ii) Ensure that any publisher’s agreements entered into by Grantee will allow for Grantee to comply with these requirements including submission of Final Peer-Reviewed Manuscripts to the NASA-designated repository, as listed in part (c)(ii) of this Section and condition, with sufficient rights to permit such repository to use such Final Peer-Reviewed Manuscript in its normal course, including rights to permit users to download XML and plain text formats.
- (iii) Hereby represent and warrant that Grantee has secured the right to submit the Final Peer-Reviewed Manuscript to the NASA-designated repository for use as set forth herein.
- (iv) Include in annual and final reports a list of Final Peer-Reviewed Manuscripts covered by this term and condition.

5. Article 15 - Federally-Owned Property and Acquired Equipment and Supplies. Grantee may have responsibility for federally-owned property transferred from CASIS for use under this Agreement, as well as equipment and supplies acquired with funds provided under this Agreement, including property and equipment for use in testing to ensure compatibility with the ISS NL. Grantee should account for all such property, equipment, and supplies in accordance with the following provisions. For any procurement of goods or services that does not meet the requirements for an acquisition of special purpose or general purpose equipment or supplies, as those terms are defined in the Federal Uniform Grant Guidance, 2 C.F.R. Part 200, Subpart A, Grantee must comply with the procurement requirements set forth in 2 C.F.R. Part 200, Subpart D.

(a) ***Federally-owned property.*** [2 C.F.R. § 200.312(a)–(b); 2 C.F.R. pt. 1800, App’x B § 1800.926].

- (i) Title to federally-owned property provided to Grantee remains vested in the Federal Government, and shall be managed in accordance with 2 C.F.R. § 200.312. The following items of federally-owned property are being provided to Grantee for use in performance of the work under this Agreement: [List property or state in Attachment B]
- (ii) The following specific items of equipment acquired by Grantee have been identified by NASA for transfer of title to the Government when no longer required for performance under this Agreement. This equipment will be managed in accordance with 2 C.F.R. § 200.313, and shall be transferred to CASIS upon completion of this Agreement, or to NASA or NASA’s designee in accordance with the procedures set forth at § 200.313(e): [List property or state in Attachment B]
- (iii) If NASA has no further need for the federally-owned property, it must declare the property excess and report it for disposal to the appropriate Federal disposal authority, unless the Federal awarding agency has statutory authority to dispose of the property by alternative methods (e.g., the authority provided by the Federal Technology Transfer Act (15 U.S.C. 3710 (i)) to donate research equipment to educational and non-profit organizations in accordance with Executive Order 12999, “Educational Technology: Ensuring Opportunity for All Children in the Next Century.”). Appropriate instructions shall be issued to Grantee by NASA.

(b) ***Exempt federally-owned property.*** [2 C.F.R. § 200.312(c); 2 C.F.R. § 1800.312].

- (i) Under the authority of the Childs Act, 31 U.S.C. §§ 6301 to 6308, NASA has determined to vest title to property acquired with Federal funds in Grantee without further obligation to NASA, including reporting requirements.
- (ii) However, NASA may only vest title to property acquired with Federal funds in nonprofit institutions of higher education or in nonprofit organizations whose primary purpose is conducting scientific research. If Grantee is not one of these types of organizations, title to otherwise-exempt federally-owned property acquired under this Agreement remains with the Federal Government.

(c) ***Equipment and Supplies Acquired with Funds Under this Agreement where Grantee is not a Commercial Firm.*** [2 C.F.R. pt. 1800, app’x B § 1800.907; 2 C.F.R. §§ 200.313 & 200.314].

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- (i) Acquisition. Grantee may acquire special purpose and general purpose equipment specifically required for use exclusively for research activities.
- (A) Acquisition of special purpose or general purpose equipment specifically required for use exclusively for research activities and costing in excess of \$5,000 (unless a lower threshold has been established by CASIS) and not included in Grantee's proposal budget, requires the prior approval of CASIS and the NASA Grant Officer. Requests to CASIS and the Grant Officer for the acquisition of equipment shall be supported by written documentation setting forth the description, purpose, and acquisition value of the equipment, and including a written certification that the equipment will be used exclusively for research, activities. (A change in the model number of a prior approved piece of equipment does not require resubmission for that item).
- (B) Special purpose and general purpose equipment costing in excess of \$5,000 (unless a lower threshold has been established by CASIS) acquired by Grantee under an agreement for the purpose of research shall be titled to the Grantee as "exempt" without further obligation to NASA, including reporting of the equipment, in accordance with 2 C.F.R. § 200.312(c) and § 1800.312. Special purpose or general purpose equipment costing in excess of \$5,000 (unless a lower threshold has been established by CASIS) acquired by Grantee under an agreement for non-research work shall be titled to Grantee in accordance with § 200.313.
- (C) Special purpose or general purpose equipment acquired by Grantee with award funds, valued under \$5,000 (unless a lower threshold is established by CASIS) are classified as "supplies," do not require the prior approval of CASIS or the NASA Grant Officer, shall vest in Grantee, and will be titled to Grantee in accordance with 2 C.F.R. § 200.314.
- (D) Award funds may be expended for the acquisition of land or interests therein or for the acquisition and construction of facilities only under a facilities award.
- (ii) Reporting. Grantee shall submit an Annual Inventory Report to CASIS, to be received no later than October 15 of each year, which lists all reportable non-exempt equipment and/or federally-owned property in its custody as of September 30. Negative responses for Annual Inventory Reports (when there is no reportable equipment) are not required. A Final Inventory Report of federally-owned property, including equipment where title was taken by the government, will be submitted by Grantee no later than sixty (60) days after the end date of the period of performance of this Agreement. Negative responses for Final Inventory Reports are required.
- (A) All Annual Inventory Reports and the Final Inventory Report must include the information listed in paragraph (d)(1) of 2 C.F.R. § 200.313, and set forth below in part (c)(iv)(A) of this Section.
- (B) The original of each report shall be submitted to the CASIS. Copies shall be furnished to NASA upon request by NASA. No specific report form or format is required, provided that all necessary information is provided.
- (iii) Property Use.

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- (A) Equipment must be used by Grantee in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by funds under this Agreement, and Grantee must not encumber the property without prior approval of NASA. When no longer needed for the original program or project, the equipment may be used in other activities supported by NASA, in the following order of priority:
- (1) Activities under a Federal award from NASA, then
 - (2) Activities under Federal awards from other Federal awarding agencies.
- (B) During the time that equipment is used on the project or program for which it was acquired, Grantee must also make equipment available for use on other projects or programs currently or previously supported by the Federal Government, provided that such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use must be given to other programs or projects supported by NASA and second preference must be given to programs or projects under Federal awards from other Federal awarding agencies. Use for non-federally-funded programs or projects is also permissible. User fees should be considered if appropriate.
- (C) Grantee must not use equipment or supplies acquired with funds under this Agreement to provide services for a fee that is less than private companies charge for equivalent services unless specifically authorized by Federal statute for as long as the Federal Government retains an interest in the equipment or supplies.
- (D) When acquiring replacement equipment, Grantee may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property.
- (iv) Property Management. Grantee's procedures for managing equipment (including replacement equipment), whether acquired in whole or in part with funds provided under this Agreement, until disposition takes place will, at a minimum, meet the following requirements:
- (A) Grantee must keep equipment records, which shall be maintained accurately and shall include the following information listed in paragraph (d)(1) of 2 C.F.R. § 200.313:
- (1) A description of the property
 - (2) A serial number or other identification number.
 - (3) The source of funding for the property (including the FAIN).
 - (4) Who holds title.
 - (5) The acquisition date
 - (6) The cost of the property.

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- (7) The percentage of CASIS funding participation in the project costs for the CASIS agreement under which the property was acquired.
- (8) The location, use, and condition of the property.
- (9) Any ultimate disposition data including the date of disposal and sale price of the property.
- (B) Grantee must take a physical inventory of the property and reconcile the results with the property records at least once every two years.
- (C) Grantee must develop a control system to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft must be investigated.
- (D) Grantee must develop adequate maintenance procedures to keep the property in good condition.
- (E) If Grantee is authorized or required to sell the property, proper sales procedures must be established to ensure the highest possible return.
- (v) Equipment Disposition. When original or replacement equipment acquired with any funding under this Agreement is no longer needed for the original project or program or for other activities currently or previously supported by NASA, except as otherwise provided in Federal statutes, regulations, or NASA disposition instructions, Grantee must request disposition instructions from CASIS. Disposition of the equipment will be made as follows, in accordance with CASIS instructions:
 - (A) Except as provided in 2 C.F.R. § 200.312(b), or if CASIS fails to provide requested disposition instructions within 120 days, items of equipment with a current per-unit fair-market value in excess of \$5,000 may be retained by Grantee or sold. CASIS is entitled to an amount calculated by multiplying the current market value or proceeds from sale by the percentage of participation in the cost of the original purchase that came from funding under this Agreement. If the equipment is sold, CASIS may permit Grantee to deduct and retain from the Federal share \$500 or ten percent of the proceeds, whichever is less, for its selling and handling expenses. Items of equipment with a current per unit fair market value of \$5,000 or less may be retained, sold or otherwise disposed of with no further obligation to CASIS.
 - (B) Grantee may transfer title to the property to CASIS or to the Federal Government provided that, in such cases, Grantee must be entitled to compensation for its attributable percentage of the current fair market value of the property.
 - (C) In cases where Grantee fails to take appropriate disposition actions, CASIS may direct Grantee to take disposition actions.

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- (vi) Supplies Disposition. If there is a residual inventory of unused supplies exceeding \$5,000 in total aggregate value upon termination or completion of this Agreement and the supplies are not needed for any other CASIS agreement, Grantee must retain the supplies for use on other activities or sell them, but must, in either case, compensate the Federal Government for its share. The amount of compensation must be computed in the same manner as for equipment, as set forth in part (c)(v)(B) of this Section.
- (d) ***Equipment and Supplies Acquired with Funds Under this Agreement where Grantee is a Commercial Firm.*** [2 C.F.R. pt. 1800, app'x B § 1800.925; 2 C.F.R. §§ 200.313 & 200.314].
- (i) Grantee may acquire special purpose equipment required for the conduct of research. Acquisition of special purpose equipment costing in excess of \$5,000 and not included in the approved proposal budget requires the prior approval of CASIS and the NASA Grant Officer, unless the item is merely a different model of an item shown in the approved proposal budget.
- (ii) Grantee may not purchase, as a direct cost to the award, items of general purpose equipment, examples of which include but are not limited to office equipment and furnishings, air conditioning equipment, reproduction and printing equipment, motor vehicles, and automatic data processing equipment. If Grantee requests an exception, Grantee shall submit a written request for CASIS and NASA Grant Officer approval, prior to purchase by Grantee, stating why Grantee cannot charge the general purpose equipment to indirect costs.
- (iii) Under no circumstances shall award funds be used to acquire land or any interest therein, to acquire or construct facilities (as defined in 48 C.F.R (FAR) § 45.301), or to procure passenger carrying vehicles.
- (iv) The Government shall have title to equipment and other personal property acquired with Government funds. Such property shall be disposed of pursuant to 48 C.F.R (FAR) § 45.603.
- (v) Title to Government furnished equipment (including equipment, title to which has been transferred to the Government prior to completion of the work) will remain with the Government.
- (vi) Grantee shall establish and maintain property management standards for Government property and otherwise manage such property as set forth in 48 C.F.R (FAR) Part 45.5 and 48 C.F.R (NFS) Part 1845.5.

- (vii) Grantee shall submit annually a NASA Form 1018, NASA Property in the Custody of Contractors, in accordance with the instructions on the form, the provisions of 48 C.F.R (NFS) § 1845.71 and any supplemental instructions that may be issued by NASA for the current reporting period. The original NF 1018 shall be submitted to the Center Deputy Chief Financial Officer (Finance) with three copies sent concurrently to the Center Industrial Property Officer. The annual reporting period shall be from October 1 of each year through September 30 of the following year. The report shall be submitted in time to be received by October 15. Negative reports (i.e. no reportable property) are required. The information contained in the reports is entered into the NASA accounting system to reflect current asset values for agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 15. A final report is required within thirty (30) days after the end of the period of performance of this Agreement.
- (viii) The requirements set forth in this part and condition supersedes the requirements and conditions set forth in part (c) of this Section.

6. Article 16 - Organizational Conflicts of Interest. [Applicable when CASIS indicates or Grantee believes that Grantee may use subjective judgment in making sub-awards or subcontracts in performing this Agreement]

- (a) When the possibility of an organizational conflict of interest (“OCI”) exists, Grantee will provide an OCI Mitigation Plan to CASIS. CASIS may make a unilateral change to the OCI Mitigation Plan as necessary.
- (b) Grantee shall promptly report any violation of the OCI Mitigation Plan, or any OCI, to CASIS. This report shall include a description of the violation and the actions the Grantee has taken or proposes to take to mitigate and avoid repetition of the violation. After conducting such further inquiries and discussions as may be necessary, CASIS and Grantee shall agree on appropriate corrective action, if any, or CASIS shall direct such action. Any breach of this provision, including any nondisclosure, or misrepresentation of material facts regarding OCIs to be disclosed, may result in termination of this Agreement.
- (c) When the possibility of an OCI exists, Grantee will ensure that OCI prevention and mitigation requirements (including this clause) flow down to affected subcontractors or sub-awardees at any tier. The terms “Grantee” and “CASIS” shall be appropriately modified to reflect the change in parties and to preserve CASIS’s and the Government’s rights.

7. Article 18 - Cross-Waiver of Liability for International Space Station Activities.

- (a) The objective of this Section is to establish a 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 be broadly construed to achieve this objective.
- (b) **Definitions.** For the purposes of this Section:
 - (i) The term “Damage” means:

- (A) Bodily injury to, or other impairment of health of, or death of, any person;
 - (B) Damage to, loss of, or loss of use of any property;
 - (C) Loss of revenue or profits; or
 - (D) Other direct, indirect, or consequential Damage.
- (ii) The term “Launch Vehicle” means an object, or any part thereof, intended for launch, launched from Earth, or returning to Earth which carries Payloads, persons, or both.
 - (iii) The term “Partner State” includes each Contracting Party for which the 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) 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.
 - (iv) The term “Payload” means all property including software to be flown or used on or in a Launch Vehicle or the ISS.
 - (v) The term “Protected Space Operations” means:
 - (A) All Launch Vehicle 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 this Agreement, the IGA, MOUs concluded pursuant to the IGA, and implementing arrangements. It includes, but is not limited to:
 - (1) Research, design, development, test, manufacture, assembly, integration, operation, or use of Launch Vehicles or Transfer Vehicles, the ISS, Payloads, or instruments, as well as related support equipment and facilities and services; and
 - (2) All activities related to ground support, test, training, simulation, or guidance and control equipment and related facilities or services.
 - (B) “Protected Space Operations” also includes all activities related to evolution of the ISS, as provided for in Article 14 of the IGA.
 - (C) “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.
 - (vi) The term “Related Entity” means:
 - (A) A contractor or subcontractor of a Party or a Partner State at any tier;

- (B) A user, grantee, or customer of a Party or a Partner State at any tier; or
- (C) A contractor or subcontractor of a user, grantee, or customer of a Party or a Partner State at any tier. The terms “contractor” and “subcontractor” include suppliers of any kind.

The term “Related Entity” may also apply to a State, or an agency or institution of a State, having the same relationship to a Partner State as described in parts (b)(vi)(A)–(C) of this Section or otherwise engaged in the implementation of Protected Space Operations as defined in part (b)(v) above.

- (vii) The term “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:
- (i) Each Party agrees to a cross-waiver of liability pursuant to which each Party waives all claims against any of the entities or persons listed in parts (c)(i)(A)–(D) of this Section 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:
 - (A) Another Party;
 - (B) A Partner State other than the United States of America;
 - (C) A Related Entity of any entity identified in part (c)(i)(A) or (c)(i)(B) of this Section; or
 - (D) The employees of any of the entities identified in parts (c)(i)(A)–(C) of this Section.
 - (ii) In addition, each Party shall, by contract or otherwise, extend the cross-waiver of liability, as set forth in (c)(i) of this Section, to its Related Entities by requiring them, by contract or otherwise, to:
 - (A) Waive all claims against the entities or persons identified in parts (c)(i)(A)–(D) of this Section; and
 - (B) Require that their Related Entities waive all claims against the entities or persons identified in parts (c)(i)(A)–(D) of this Section.

- (iii) 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.
- (iv) Notwithstanding the other provisions of this Section, this cross-waiver of liability shall not be applicable to:
 - (A) Claims between a Party and its own Related Entity or between its own Related Entities;
 - (B) Claims made by a natural person, his/her estate, survivors or subrogees (except when a subrogee is a Party to this Agreement or is otherwise bound by the terms of this crosswaiver) for bodily injury to, or other impairment of health of, or death of, such person;
 - (C) Claims for Damage caused by willful misconduct;
 - (D) Intellectual Property Claims;
 - (E) Claims for Damage resulting from a failure of a Party to extend the cross-waiver of liability to its Related Entities, pursuant to part (c)(ii) of this Section; or
 - (F) Claims by a Party arising out of or relating to another Party's failure to perform its obligations under this Agreement.
- (v) Nothing in this Section shall be construed to create the basis for a claim or suit where none would otherwise exist.

8. Article 19 - No Claims Against NASA or U.S. Government. [2 C.F.R. pt. 1800, App'x B § 1800.918].

(a) With respect to activities undertaken under this Agreement, Grantee agrees not to make any claim against NASA or the U.S. Government with respect to the injury or death of its employees or its sub-awardees/contractors and sub-award/subcontractor employees, or to the loss of its property or that of its sub-awardees/contractors and sub-awardees/subcontractors, whether such injury, death, damage or loss arises through negligence or otherwise, except in the case of willful misconduct.

9. Article 20 - Sensitive Information. The following two clauses concerning access to and release of sensitive information shall apply to this Agreement if CASIS determines that this Agreement involves access and/or the furnishing of sensitive information.

(a) ***Access to Sensitive Information.*** [*Applicable to the extent this Agreement involves access to sensitive information*]

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- (i) As used in this part, “sensitive information” refers to information that Grantee has developed at private expense, or that the Government has generated that qualifies for an exception to the Freedom of Information Act, which is not currently in the public domain, and which may embody trade secrets or commercial or financial information, and which may be sensitive or privileged.
- (ii) To assist NASA in accomplishing management activities and administrative functions, Grantee shall provide the services specified elsewhere in this Agreement.
- (iii) If performing this Agreement entails access to sensitive information, as defined above, Grantee agrees to –
 - (A) Utilize any sensitive information coming into its possession only for the purposes of performing the services specified in this Agreement, and not to improve its own competitive position in another procurement.
 - (B) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.
 - (C) Allow access to sensitive information only to those employees that need it to perform services under this Agreement.
 - (D) Preclude access and disclosure of sensitive information to persons and entities outside of Grantee’s organization.
 - (E) Train employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in this Agreement and to safeguard it from unauthorized use and disclosure.
 - (F) 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 Agreement.
 - (G) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to CASIS, and implement any necessary corrective actions.
- (iv) Grantee will comply with all procedures and obligations specified in its Organizational Conflicts of Interest Avoidance Plan, which this Agreement incorporates as a compliance document.

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- (v) The nature of the work on this Agreement may subject Grantee and its employees to a variety of laws and regulations relating to ethics, conflicts of interest, corruption, and other criminal or civil matters relating to the award and administration of government contracts. Recognizing that this Agreement establishes a high standard of accountability and trust, the Government will carefully review Grantee's performance in relation to the mandates and restrictions found in these laws and regulations. Unauthorized uses or disclosures of sensitive information may result in termination of this Agreement for default, or in debarment of Grantee for serious misconduct affecting present responsibility as a government contractor.
 - (vi) Grantee shall include the substance of this clause, including this part (vi), suitably modified to reflect the relationship of the parties, in all subcontracts or sub-awards that may involve access to sensitive information.
- (b) ***Release of Sensitive Information.*** *[Applicable to the extent this Agreement requires the furnishing of sensitive information]*
- (i) As used in this part, "sensitive information" refers to information, not currently in the public domain, that Grantee has developed at private expense, that may embody trade secrets or commercial or financial information, and that may be sensitive or privileged.
 - (ii) 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 Grantee under this Agreement. By performing this Agreement, Grantee agrees that NASA may release to its service providers, their subcontractors, and their individual employees, sensitive information submitted during the course of this Agreement, subject to the enumerated protections mandated by the clause at 48 C.F.R. § 1852.237-72, Access to Sensitive Information.
 - (iii) Grantee shall identify any sensitive information submitted in support of its proposal or in performing this Agreement. For purposes of identifying sensitive information, Grantee may, in addition to any other notice or legend otherwise required, use a notice similar to the following:
 - (A) Mark the title page with the following legend:
 - (1) 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 48 C.F.R. § 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].

- (B) Mark each page of sensitive information Grantee wishes to restrict with the following legend:
- (1) Use or disclosure of sensitive information contained on this page is subject to the restriction on the title page of this proposal or document.
 - (iv) CASIS 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 48 C.F.R. § 1852.237-72, Access to Sensitive Information. However, unless CASIS decides, with the advice of counsel, that reasonable grounds exist to challenge Grantee’s claim that particular information is sensitive, NASA and its service providers and their employees shall comply with all of the safeguards contained in part (v) of this clause.
 - (v) 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 48 C.F.R. § 1852.237-72, Access to Sensitive Information. This clause obligates the service provider to do the following:
 - (A) Comply with all specified procedures and obligations, including the Organizational Conflicts of Interest Avoidance Plan, which the contract has incorporated as a compliance document.
 - (B) Utilize any sensitive information coming into its possession only for the purpose of performing the services specified in its contract.
 - (C) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.
 - (D) Allow access to sensitive information only to those employees that need it to perform services under its contract.
 - (E) Preclude access and disclosure of sensitive information to persons and entities outside of the service provider’s organization.
 - (F) 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.
 - (G) 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 the contract.
 - (H) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the Contracting Officer, and implement any necessary corrective actions.

- (vi) 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 48 C.F.R. § 1852.204-76, Security Requirements for Unclassified Information Technology Resources. The Security Requirements clause requires the service provider to implement an Information Technology Security Plan to protect information processed, stored, or transmitted from unauthorized access, alteration, disclosure, or use. Service provider personnel requiring privileged access or limited privileged access to these information technology systems are subject to screening using the standard National Agency Check (NAC) forms appropriate to the level of risk for adverse impact to NASA missions. The Contracting Officer may allow the service provider to conduct its own screening, provided the service provider employs substantially equivalent screening procedures.
- (vii) This clause does not affect NASA's responsibilities under the Freedom of Information Act.
- (viii) Grantee shall insert this clause, including this part (viii), suitably modified to reflect the relationship of the parties, in all subcontracts and sub-awards that may require the furnishing of sensitive information.

10. Article 21 - Compliance with Laws and Regulations.

(a) The Parties shall comply with all applicable laws and regulations including, but not limited to, safety; security; export control; environmental; and suspension and debarment laws and regulations. Access by a Party to NASA facilities or property, or to a NASA Information Technology (IT) system or application, is contingent upon compliance with NASA security and safety policies and guidelines including, but not limited to, standards on badging, credentials, and facility and IT system/application access.

(b) ***Nondiscrimination.*** [2 C.F.R. pt. 1800, App'x B § 1800.911; 14 C.F.R. pts. 1250–53].

- (i) To the extent provided by law and any applicable agency regulations, this Agreement and any program assisted thereby are subject to the provisions of Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352), Title IX of the Education amendments of 1972 (Pub. L. 92-318, 20 U.S.C. 1681 et seq.), section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), the Age Discrimination Act of 1975 (Pub. L. 94-135), and the implementing regulations issued pursuant thereto by NASA.
- (ii) Grantee hereby acknowledges and agrees that it must comply (and require any subrecipients, sub-awardees, contractors, subcontractors, successors, transferees, and assignees to comply) with applicable provisions of national laws and policies prohibiting discrimination, including but not limited to Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352), Title IX of the Education amendments of 1972 (Pub. L. 92-318, 20 U.S.C. 1681 et seq.), section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), the Age Discrimination Act of 1975 (Pub. L. 94-135), and the implementing regulations issued pursuant thereto by NASA and Grantee hereby gives assurance that it will immediately take any measure necessary to effectuate this Agreement.

- (iii) Except for commercially available supplies, materials, equipment, or general support services, Grantee shall obtain an assurance of compliance as required by NASA regulations from each organization that applies or serves as a subrecipient, sub-awardee, contractor, or subcontractor under this Agreement.

- (c) ***Clean Air and Water.*** [2 C.F.R. pt. 1800, App'x B § 1800.912].
 - (i) Grantee agrees to the following:
 - (A) Comply with applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended (42 U.S.C. 7401 et seq.) and of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.).
 - (B) Ensure that no portion of the work under this Agreement will be performed in a facility listed on the Environmental Protection Agency (EPA) List of Violating Facilities on the date that this Agreement was effective unless and until the EPA eliminates the name of such facility or facilities from such listings.
 - (C) Use its best efforts to comply with clean air standards and clean water standards at the facility in which the Agreement is being performed.
 - (D) Insert the substance of these terms and conditions into any nonexempt sub-award or contract under this Agreement.
 - (E) Report violations to NASA and to EPA.

 - (d) ***Restrictions on Funding Activities with China.***
 - (i) Pursuant to The Department of Defense and Full-Year Appropriation Act, Public Law 112-10, Section 1340(a); The Consolidated and Further Continuing Appropriation Act of 2012, Public Law 112-55, Section 539; and future year appropriations (hereinafter, “the Acts”), NASA is restricted from using funds appropriated in the Acts to enter into or fund any grant or cooperative agreement of any kind to participate, collaborate, or coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level or at any subrecipient level, whether the bilateral involvement is funded or performed under a no-exchange of funds arrangement.
 - (ii) Definition: “China or Chinese-owned Company” means the People’s Republic of China, any company owned by the People’s Republic of China, or any company incorporated under the laws of the People’s Republic of China.
 - (iii) Restriction. By executing this agreement, Grantee certifies that it is not a Chinese-Owned Company. Grantee also agrees that it will not grant any sub-award or subcontract under this Agreement with China or any Chinese-owned company.
 - (iv) The restrictions in the Acts do not apply to commercial items of supply needed to perform a grant or cooperative agreement.

- (v) Sub-awards. Grantee shall include the substance of this provision in all sub-awards made hereunder.

- (e) ***Restrictions on Certain Countries, Entities, and Persons; Export Control.***
 - (i) Grantee and any subrecipient at any tier, including subcontractors and sub-awardees, shall not engage in any activities, including financial transactions, with a designated country (or entity or person therein) listed on NASA's Designated Countries List without consultation and approval from NASA Export Control and the NASA Office of International and Interagency Relations (OIIR). Please reference NASA's Designated Country List at the NASA Export Control Website <https://oiir.hq.nasa.gov/nasaecp/>. This list is regularly updated, therefore please consult the website to ensure use of the most up-to-date list. Grantee is required to follow the most current list of NASA's Designated Countries.
 - (ii) Grantee will comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 C.F.R. Parts 120 through 130, and the Export Administration Regulations (EAR), 15 C.F.R. Parts 730 through 799, in performing work under this Agreement or any Amendment to this Agreement. In the absence of available license exemptions or exceptions, Grantee 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. Additionally, Grantee shall be responsible for appropriately identifying, classifying, and marking data that is subject to these regulations.
 - (iii) Grantee shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of work under this Agreement or any Amendment under this Agreement, including instances where the work is to be performed on-site at NASA and where the foreign person will have access to export-controlled technical data or software.
 - (iv) Grantee will be responsible for all regulatory record-keeping requirements associated with the use of licenses and license exemptions or exceptions.
 - (v) Grantee will be responsible for ensuring that the provisions of this part (d) apply to its Related Entities or users.

- (f) ***Anti-Lobbying.*** [2 C.F.R. § 200.450; 14 C.F.R. pt. 1271].
 - (i) Grantee certifies, to the best of its knowledge and belief, that:
 - (A) No Federal appropriated funds have been or will be paid, by or on behalf of Grantee, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

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- (B) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, Grantee shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.
- (ii) Grantee shall require that the language of this certification be included in the award documents for all covered subawards over \$100,000 at all tiers (including subcontracts, subgrants and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.
- (g) **Trafficking in Persons.** [2 C.F.R. pt. 175].
 - (i) Grantee, its employees, its subrecipients under this Agreement, and its subrecipients’ employees may not—
 - (A) Engage in severe forms of trafficking in persons during the period of time that the Agreement is in effect;
 - (B) Procure a commercial sex act during the period of time that the Agreement is in effect; or
 - (C) Use forced labor in the performance of the award or sub-awards under the Agreement.
 - (ii) CASIS may unilaterally terminate this Agreement, without penalty, if Grantee or a subrecipient that is a private entity —
 - (A) Is determined to have violated a prohibition in part (g)(i) of this Section; or
 - (B) Has an employee who is determined by CASIS to have violated a prohibition in paragraph (g)(i) of this Section through conduct that is either—
 - (1) Associated with performance under this Agreement; or
 - (2) Imputed to Grantee or its subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 C.F.R. part 180, “OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement),” as implemented by NASA at 2 C.F.R. part 1880.
 - (iii) Grantee must inform CASIS and NASA immediately of any information it receives from any source alleging a violation of a prohibition in part (g)(i) of this Section.
 - (iv) CASIS’s right to terminate this Agreement under part (g)(ii) of this Section is in addition to all other remedies for noncompliance that are available to CASIS under this Agreement.



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- (v) Grantee must include the requirements of part (g)(i) of this Section in any sub-award that it makes to a private entity.

(h) ***Suspension and Debarment.*** With respect to suspension and debarment requirements, Grantee certifies, to the best of its knowledge and belief, that it has complied, and shall comply, with 2 C.F.R part 180, Subpart C, as supplemented by 2 C.F.R part 1880, Subpart C.

11. Article 23 - Additional Terms.

(g) ***Sub-Awards.*** Funding under this Agreement, or any portion thereof, may not be sub-awarded without the prior written notification to CASIS. No sub-award shall relieve Grantee of its liability and obligation under this Agreement, and CASIS shall deal exclusively with Grantee, not any sub-awardee.

(k) ***Procurement of Goods and Services.*** All purchases of goods and services made in whole or part with funding provided under this Agreement must comply with the procurement requirements set forth in the Federal Uniform Grant Guidance, 2 C.F.R. Part 200, Subpart D, including the requirements for competitive proposals, sole source justifications, and adequate record keeping to document the rationale for the method of procurement, the basis for vendor selection or rejection, the justification for lack of competition when competitive proposals are not obtained, and the basis for the procurement contract price or cost. Grantee must maintain records to document its compliance with the requirements of 2 C.F.R. Part 200, Subpart D.

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