

USER AGREEMENT FLOW DOWN CLAUSES

1. Responsibilities.

(a) User shall use its best efforts to perform the activities in the Proposal, referenced herein as Attachment A, and complete the Milestones specified in Section 4(a) to this Agreement (collectively, “Responsibilities”).

(b) User shall supply all necessary personnel, equipment, materials and resources except as otherwise may be provided for herein, to perform the Responsibilities. User may be required, at its own cost, to travel to support project activities, including experiment design/development, payload development, experiment and payload verification testing, design reviews, or other payload integration processes. User shall perform its Responsibilities diligently and conscientiously and in accordance with the highest professional standards and all applicable laws and regulations.

2. Reports.

(a) **Milestone Reports.** User will provide CASIS with Milestone Reports in accordance with the Milestone Schedule in Section 4(a). Each Milestone Report shall include the following:

- (i) Status of each projected milestone in the Agreement, including analysis of any unmet milestones. (For unmet milestones, User shall, as appropriate, meet with CASIS Operations staff to develop a plan to meet project objectives within the required timeline.) Many milestones and required preflight activities will take place in collaboration with User selected implementation partners—interactions that CASIS will facilitate. Whether User reaches these milestones directly or in collaboration with service providers, Milestone Reports must document the effort made towards each objective.
- (ii) Identified resources for ground-based preflight and postflight activities. (Most, if not all, ground-based studies must be completed by the time of the second Milestone Report to ensure flight readiness and, ultimately, that the necessary work and materials are ready for launch.)
- (iii) Non-confidential results and relevant information from preflight activities, ground testing and in-orbit testing, including any changes in proposed experimental methodology or data analysis and processing.
- (iv) Development and testing status of required payload integration products, including elements to be flight certified (e.g., hardware, delivery of system for launch, or software integration).
- (v) When appropriate, status of development, testing and operation of hardware and products.
- (vi) Details confirming that flight research and development complies with NASA’s space station payload requirements and all NASA rules and regulations of such activity.

(b) **Annual Inventory Report.** User will provide CASIS an Annual Inventory Report, to be received no later than October 15 of each year, which lists all reportable federally-owned property related to this Agreement in its custody as of September 30.

(c) **Final Report.** At the completion of the project, User will submit a Final Report that addresses the following additional items:

- (i) A listing of each objective in the original proposal.
- (ii) The extent to which the project achieved each objective and, for unmet objectives or expectations, an analysis of underlying issues and assumptions that may have influenced the unexpected outcome.
- (iii) A listing, from the User's principal investigator's perspective, of each new finding that can be traced to methods or approaches developed in the work done under this Agreement. The list should note any new outcomes related to microgravity or other flight-related variables.
- (iv) How the work benefits scientific advancement and/or commercial potential.
- (v) The status of the project's influence on the greater U.S. population, as described in the initial proposal (i.e., scientific and economic impact).
- (vi) Future directions for commercialization, if applicable, or for disseminating results, moving forward with the scientific or other relevant pathways.
- (vii) A report of any patentable inventions.
- (viii) A summary of pending publications, as well as any published reports.
- (ix) A report of all Government Furnished Equipment (GFE) and Government Furnished Information (GFI).

3. Schedule and Milestones.

(a) The planned major project milestones for User's Responsibilities are as follows:

Milestone Schedule		
Milestone #	Milestone Description	Due Date
001	<i>Authorization to Proceed ("ATP")</i>	
002	<i>Complete pre-flight planning tasks:</i>	
003	<i>Milestone Report 1:</i>	

004	<i>Milestone Report 2:</i>	
005	<i>Milestone Report 3:</i>	
006	<i>Milestone Report 4:</i>	
007	<i>Final Report:</i>	

“L” is defined as the proposed launch date.

"R" is defined as the return of data, samples, and/or hardware following the completion of on-orbit operations.

(b) Any schedule or milestone in this Agreement, including any Modifications, is estimated based upon the Parties’ current understanding of the projected availability of CASIS’s Facility allocation. The use of the Facility by all Parties is subject to and contingent upon the availability of NASA goods, services, facilities, or equipment, and User acknowledges that the availability of these NASA resources may be outside the authority and control of CASIS. The Parties acknowledge and agree that NASA is not a party to this Agreement, and that CASIS is not responsible for any conduct of NASA. The Parties recognize that some or all aspects of the space flight program, including the flight opportunity and the launch date, the time onboard the ISS, the ability of the crew to interface with the payload, or the specific mission that will carry the payload may change in date or duration, or become unable to be realized. User accepts the risk that NASA priorities may impact User’s priority and use of the Facility. The Parties will hold each other harmless in the event of a change in policy, procedure, or agreement instituted by NASA or any organization acting on its behalf, as well as based on any actions of NASA or any such organization acting on its behalf. In the event that a flight opportunity is canceled for any reason, CASIS and User will make every reasonable effort to re-schedule on the next available launch vehicle. In the event that projected availability changes, User shall be given reasonable notice of that change, so that the schedule and milestones may be adjusted accordingly. The Parties understand and agree that NASA is the final arbiter on all issues related to any flight opportunity under this Agreement, including without limitation flight manifest, safety review, technical review, access to astronaut’s time, and return, if appropriate, of the payload.

(c) Should a conflict arise between two users with CASIS agreements, CASIS, in its sole discretion, shall determine the priority as between the two users. CASIS shall not be liable to User if, for any reason, User’s payload(s) are not flown to the Facility, or there is a delay or change in the prioritization of any User payload(s).

(d) Travel Expenses and Payments. Travel expenses reimbursed by CASIS must be approved by prior written consent of CASIS management at least five (5) business days in advance of travel and in accordance with the attached Policy HR-029. Reasonable out-of-pocket expenses for out-of-area travel shall be reimbursed at cost, subject to the following

conditions: (a) no expenses shall be reimbursed without prior authorization by CASIS, including expenses for airfare (coach only), lodging, rental car, and incidentals; (b) separate invoices must be provided, for out-of-pocket expenses and travel reimbursement in connection with this Agreement, and include the supporting mileage log and receipt for costs incurred reflecting dates and costs in conjunction with activities pertaining to this Agreement.

4. User Obligations.

(a) **Submission of Milestone Reports.** User shall submit interim Milestone Reports in accordance with the schedule in Section 4(a) which shall include the information set forth in Section 2(a). The Milestone Reports must describe the progress made since the last report, plans forward, and any difficulties encountered and the corrective action necessary to recover. Each Milestone Report shall be provided to ops@issnationallab.org.

(b) **Submission of Final Report.** User shall submit a Final Report in accordance with the schedule in Section 4(a), which shall include the information set forth in Section 2(c). The Final Report shall be provided to ops@issnationallab.org within thirty (30) days of User's completion of the project, expiration, or termination of the Agreement, whichever is earlier.

5. Record Retention and Audits.

(a) User shall retain all records pertinent to this Agreement, including financial, research, statistical, audit, and property records. CASIS, NASA, the Comptroller General of the United States, or any of their duly authorized representatives or investigators shall have access to these records for inspection, monitoring, auditing, or investigative purposes.

(b) CASIS may perform audits of User at any time during the performance of the Agreement to ensure that organizational controls are in place to ensure compliance with applicable laws and regulations.

(c) If User is an institution of higher education or other non-profit organization (including a hospital) it shall be subject to the audit requirements contained in the Single Audit Act Amendments of 1966 (31 U.S.C. 7501-7507) and 2 C.F.R. 200 Uniform Guidance. If User is a commercial organization, it shall be subject to audit by CASIS pursuant to parts (a) and (b) of this Section.

6. Term and Termination.

(a) **Term.** This Agreement becomes effective on the "Effective Date" as written above and shall expire on **MM/DD/YY** unless earlier terminated as set forth below. User's project(s) must be ready to fly within 12 months of the Effective Date unless otherwise agreed by the Parties in writing, and projects must be completed (with final report submitted) by 6 months post-flight.

(b) Termination.

- (i) This Agreement may be terminated in whole or in part if any of the following conditions have occurred:

- (A) By CASIS, if CASIS determines that User fails to comply with any material requirement of the Agreement;
 - (B) By CASIS, if CASIS determines that the action or inaction of the User substantially endangers the performance of the Agreement or such occurrence can be reasonably anticipated;
 - (C) By either Party, if CASIS and the User mutually agree to complete or partial termination; or
 - (D) By CASIS, upon CASIS's sending to User written notification setting forth the reasons for the termination, the effective date, and in the event of a partial termination, the portion to be terminated.
- (ii) User shall submit to CASIS, within ninety (90) calendar days after the date of any termination or expiration of this Agreement, all reports as required by the terms and conditions of the Agreement.

7. Enforcement.

(a) If User materially fails to comply with the terms and conditions of this Agreement, whether stated in a statute, regulation, assurance, application, or this Agreement, CASIS may take one or more of the following actions.

- (i) Wholly or partly terminate the Agreement;
- (ii) Withhold further awards; or
- (iii) Take other remedies that may be legally available.

8. Use of Names and Emblems and Release of General Information to the Public.

(a) **NASA Name and Initials.** User shall not use "National Aeronautics and Space Administration" or "NASA" in a way that creates the impression that a product or service has the authorization, support, sponsorship, or endorsement of NASA, which does not, in fact, exist. Except for releases under the "Release of General Information to the Public and Media" clause, User must submit any proposed public use of the NASA name or initials (including press releases and all promotional and advertising use) to CASIS, and to the extent CASIS deems appropriate CASIS may submit such proposed public use to the NASA Assistant Administrator for the Office of Communication or designee ("NASA Communications") for review and approval. Approval by NASA Communications shall be based on applicable law and policy governing the use of the NASA name and initials.

(b) **NASA Emblems.** Use of NASA emblems (i.e., NASA Seal, NASA Insignia, NASA logotype, NASA Program Identifiers, and the NASA Flag) is governed by 14 C.F.R. Part 1221. User must submit any proposed use of the emblems to CASIS, and to the extent CASIS deems appropriate CASIS may submit such proposed use to NASA Communications for review and approval.

9. Rights in Data – Use of Facility. [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).”

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

(a) **Definitions.**

- (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 User 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. User 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 User 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 User.*

- (i) User will disclose each subject invention to NASA and CASIS within two months after the inventor discloses it in writing to User 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, User 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 User.
- (ii) User 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) User 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. User 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.

(d) *Conditions When the Government May Obtain Title.* User will convey to NASA, upon written request, title to any subject invention—

- (i) If User 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 User to disclose or elect within the specified times.
- (ii) In those countries in which User fails to file patent applications within the times specified in part (c) of this Section, above; provided, however, that if User 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, User shall continue to retain title in that country.
- (iii) In any country in which User 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 User and Protection of User Right to File.*

- (i) User will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if User fails to disclose the invention within the times specified in part (c) of this Section, above. User's license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which User is a party and includes the right to grant sublicenses of the same scope to the extent User 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 User's business to which the invention pertains.

- (ii) User'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 User 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 User, 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 User a written notice of its intention to revoke or modify the license, and User will be allowed thirty days (or such other time as may be authorized by NASA for good cause shown by User) after the notice to show cause why the license should not be revoked or modified. User 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) *User Action to Protect the Government's Interest.*

- (i) User 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 User elects to retain title, and (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.
- (ii) User 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 User each subject invention made under this Agreement in order that User 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. User 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) User 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) User 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.”

- (v) User shall include a list of any Subject Inventions required to be disclosed during the preceding year in the performance report, technical report, or renewal proposal. A complete list (or a negative statement) for the entire award period shall be included in the summary of research.

(g) Subcontracts (including purchase orders per 2 C.F.R. part 200).

- (i) User 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 User in this Section, and User will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor’s subject inventions.
- (ii) User will include the clause at 48 C.F.R § 1852.227-70, 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 of any of the types described in 48 C.F.R § 1827.303-70(b)(1)-(6).
- (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 Paragraph 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. User 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 User 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 User, and such other data and information as CASIS or NASA may reasonably specify. User 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 User.

(i) Preference for United States Industry. Notwithstanding any other provision of this Section, User 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 User 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.*** User 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 User, 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 User, 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 User 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 User, 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 User, 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 User 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 User;
- (ii) User 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 User 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 User 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 User 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 User. However, User agrees that the Secretary may review User's licensing program and decisions regarding small business applicants, and User will negotiate changes to its licensing policies, procedures, or practices with the Secretary when the Secretary's review discloses that User 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. If any reports contain information describing a "subject invention" for which User 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 User identify the information and the "subject invention" to which it relates at the time of submittal. If required by the NASA Grant Officer, User 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 User has applied for patents.

11. Patent Rights – Class Waiver. [Applicable to Entity Other than Small Business or Non-Profit Organization]

(a) Definitions.

- (i) "Administrator," as used in this clause, means the Administrator of the National Aeronautics and Space Administration (NASA) or duly authorized representative.
- (ii) "Chairperson," as used in this clause, means the Chairperson of the NASA Inventions and Contributions Board.
- (iii) "Contract," as used in this clause, means any actual or proposed contract, agreement, understanding, or other arrangement, and includes any assignment, substitution of parties, or subcontract executed or entered into thereunder.
- (iv) "Contracting Officer," as used in this clause, means the NASA Grants Officer.
- (v) "Made," as used in this clause, 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 contract performance.
- (vi) "Nonprofit organization," as used in this clause, 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.

- (vii) “*Practical application*,” as used in this clause, 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.
- (viii) “*Reportable item*,” as used in this clause, means any invention, discovery, improvement, or innovation of the User, 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 contract or in the performance of any work that is reimbursable under any clause in any NASA contract providing for reimbursement of costs incurred before the effective date of the contract. 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.
- (ix) “*Subject invention*,” as used in this clause, 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.).
- (x) “*User*,” as used in this clause, means any of the class of persons performing work on or related to the International Space Station National Laboratory (ISS-NL) under a privately funded User Agreement facilitated by the Center for the Advancement of Science in Space (CASIS) under cooperative agreement number 80JSC018M0005 with NASA.

(b) *Rights of the User-Waiver of Title.*

- (i) Through an Instrument of Class Waiver executed by NASA on July 17, 2017, which is subject to the terms and conditions of NASA Patent Waiver Regulations and this Instrument of Waiver (including those conditions specifically provided below), the Administrator of NASA has waived the property rights of the United States Government in the United States of America and in all foreign countries, and conveyed to the User (waiver recipient) the entire right, title, and interest in and to each reportable item.
- (ii) *Presumption of title.*
 - (A) Notwithstanding paragraph (b)(i) above, 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 (1)(A) or (1)(B) of section 20135(b) of the National Aeronautics and Space Act (51 U.S.C. § 20135(b)) (hereinafter called “the Act”).

(c) *Terms and Conditions of Waiver of Rights.*

- (i) This waiver of rights applies only to inventions reported to NASA under the applicable terms of this User Agreement and which are designated within 6 months (or such longer period as expressly approved by NASA) of reporting as being an invention on which the waiver recipient elects title to the invention and intends to file a U.S. patent application.
- (ii) This waiver of rights is voidable at the option of the Administrator, should the terms of paragraph (f)(v) of this clause not be followed.
- (iii) With respect to any particular invention, in the event the waiver recipient acknowledges that the conditions upon which this waiver is based have not been satisfied, or in the event the Administrator voids this waiver where conditions of paragraph (f)(v) below have not been met, it will deliver to the Administrator the property rights waived above, including the instrument of waiver, upon request, and an instrument of assignment for any patent application or any patent which may have been filed thereon, and that failing to deliver to the Administrator such duly executed assignment, the Administrator may prepare a decision voiding the waiver of rights which shall operate to restore title to the United States to said invention. Such decision shall be conclusive evidence as to the title of the United States to said invention and that the Commissioner of the Patent and Trademark Office shall be authorized upon the filing of said decision to record the title to said invention, patent application or patent, as applicable, in the name of the United States.

(d) *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 C.F.R. 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 Government or any agency thereof, or any foreign government pursuant to any existing or future treaty or agreement with the United States; and
 - (B) March-in rights. With respect to the invention, NASA has the right in accordance with 14 C.F.R. § 1245.117 to require the waiver recipient, an assignee or exclusive licensee of the 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 the waiver recipient, assignee, or exclusive licensee refuses such a request, NASA has the right to grant such a license itself if NASA determines that:

- (1) Such action is necessary because the waiver recipient or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the invention in such field of use;
 - (2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the waiver recipient, assignee, or their licensees;
 - (3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the waiver recipient, assignee, or their licensees; or
 - (4) Such action is necessary because the agreement required by paragraph (g) below has not been obtained or waived or because a license of the exclusive right to use or sell the invention in the United States is in breach of such agreement.
- (ii) Nothing contained in this paragraph (d) shall be considered to grant to the Government any rights with respect to any invention other than a subject invention.
- (iii) Notwithstanding any other provision in this paragraph (d), if a Government employee is a co-inventor on an invention to which the User receives title pursuant to the waiver in paragraph (b)(i), or if the Government obtains ownership rights from a third-party inventor or owner on an invention to which the User receives title pursuant to the waiver in paragraph (b)(i), then the User and the United States Government shall be co-owners of the invention. As co-owners, both parties agree to negotiate in good faith with respect to (1) the cost of obtaining and maintaining any patents, (2) the exploitation of the invention (including the possibility of providing exclusive rights to the waiver recipient), and (3) the sharing of any licensing revenue. Nevertheless, if both parties fail to agree, then each co-owner may act separately to the extent permitted by law.

(e) *Minimum Rights to the User (Applicable if User Does not Elect Title).*

- (i) The User 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 User fails to disclose the subject invention within the times specified in paragraph (f)(ii) of this clause. The User license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the User is a party and includes the right to grant sublicenses of the same scope to the extent the User was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of the Administrator except when transferred to the successor of that part of the User's business to which the invention pertains.
- (ii) The User'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 C.F.R. 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 User 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 User, 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 User will be provided a written notice of the Administrator's intention to revoke or modify the license, and the User will be allowed 30 days (or such other time as may be authorized by the Administrator for good cause shown by the User) after the notice to show cause why the license should not be revoked or modified. The User has the right to appeal to the Administrator any decision concerning the revocation or modification of its license.
- (iv) This paragraph (e) shall apply only if the User does not elect title to an invention conceived or first reduced to practice under this User Agreement or title is otherwise conveyed to the Government.

(f) *Invention Identification, Disclosures, Reports and Other User Obligations.*

- (i) The User shall establish and maintain active and effective procedures to assure that reportable items are promptly identified and disclosed to User personnel responsible for the administration of this Patent Rights clause within six months of conception and/or first actual reduction to practice, whichever occurs first in the performance of work under this agreement. 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 User shall furnish the Contracting Officer a description of such procedures for evaluation and for determination as to their effectiveness.
- (ii) The User will disclose each reportable item to CASIS and to the Contracting Officer within two months after the inventor discloses it in writing to User personnel responsible for the administration of this Patent Rights clause or, if earlier, within six months after the User 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 User. The disclosure to CASIS and to the agency shall be in the form of a written report and shall identify the agreement 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

CASIS and to the agency, the User will promptly notify CASIS and 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 User for such invention. **The User will inform CASIS and the Contracting Officer within six months of disclosing a reportable item if it elects title and intends to file a U.S. patent application.** The waiver shall extend to the claimed invention of any division or continuation of the patent application filed on the reported invention provided the claims of the subsequent application do not substantially change the scope of the reported invention.

- (iii) The User may use whatever format is convenient to disclose reportable items and elect title as required in subparagraph (f)(ii). NASA prefers that the User use either the electronic or paper version of NASA Form 1679, Disclosure of Invention and New Technology (Including Software) to disclose reportable items. Both the electronic and paper versions of NASA Form 1679 may be accessed at the electronic New Technology Reporting Web site <http://invention.nasa.gov>.
- (iv) The User shall furnish CASIS and the Contracting Officer the following:
 - (A) Interim reports every 12 months (or such longer period as may be specified by the Contracting Officer) from the date of the contract, 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 (f)(i) of this clause have been followed.
 - (B) A final report, within 3 months after completion of the contracted work, listing all reportable items or certifying that there were no such reportable items, and listing all subcontracts at any tier containing a patent rights clause or certifying that there were no such subcontracts.
- (v) Should the User elect title to an invention conceived or first reduced to practice under this User Agreement, it must:
 - (A) With respect to domestic rights, file or cause an application for U.S. Letters Patent to be filed within 1 year from notification to NASA of election of title (or such longer period as expressly approved by NASA) disclosing and claiming the invention, and including within the first paragraph of the specification following the abstract, the statement:

The invention described herein was made in the performance of work under a User Agreement issued pursuant to NASA Cooperative Agreement 80JSC018M0005 with the Center for the Advancement of Science in Space (CASIS) and is subject to the provisions of section 20135 of the National Aeronautics and Space Act (51 U.S.C. § 20135).
 - (B) With respect to foreign rights, file or cause to be filed a patent application in foreign countries within 10 months from the date that a corresponding U.S. patent application has been filed, or 6 months from the date a license is

granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order, or such longer periods as may be expressly approved by NASA.

- (C) Furnish to the Chairperson or to the patent representative designated in this User Agreement the filing date, serial number, and title of the waived invention, and upon request a copy of any domestic or foreign patent application including an English version if filed in a language other than English, and a copy of the patent or the patent number and issue date.
 - (D) Deliver to the Chairperson a duly executed and approved instrument, prepared by the Government, fully confirming of all the rights domestic and foreign to which the Government is entitled, as set forth in paragraph (d) of this clause.
 - (E) With respect to any country in which the User decides not to continue prosecution of any application, to pay maintenance fees on, or defend in reexamination or opposition proceedings on a patent on a waived invention, the User shall notify the patent representative within sufficient time for NASA to continue prosecution, pay the maintenance fee or defend the reexamination or opposition, and upon written request, convey title to NASA and execute all papers necessary for NASA to proceed with the appropriate action.
 - (F) File during the term of the patent a utilization report with the Chairperson, upon NASA's written request, not more often than annually setting forth in detail the steps taken by the User or its licensees or assigns regarding the progress, development, application, and commercial use being made and that is intended to be made of the invention.
 - (G) Notify the Chairperson prior to any transfer of principal rights in such invention to any party and identify such party by name and address.
 - (H) Grant any license that the Administrator is entitled to require under this clause.
- (vi) Should the User not elect title to an invention conceived or first reduced to practice under this User Agreement, the User agrees, upon written request of the Contracting Officer, to furnish additional technical and other information available to the User 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.
 - (vii) The User agrees, subject to section 27.302(j), of the Federal Acquisition Regulation (FAR), that CASIS and the Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause.

(g) ***Preference for United States Industry.*** Unless provided otherwise, no User that receives title to any subject invention and no assignee of any such User 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 User 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.

12. 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 User, that includes all modifications from the publishing peer review process, and all graphics and supplemental material prepared by User.

(c) User 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 User anticipates the creation of a Final Peer-Reviewed Manuscript. User 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 User will allow for User 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 User 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.

13. Federally-Owned Property and Equipment. [2 C.F.R. § 200.312(a)–(b); 2 C.F.R. pt. 1800, App'x B § 1800.926]. User may have responsibility for federally-owned property

transferred from CASIS for use under this Agreement. User should account for all such property and equipment, and supplies in accordance with the following provisions.

(a) Title to federally-owned property provided to User 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 User for use in performance of the work under this Agreement: [List property or state in Attachment B]

(b) The following specific items of equipment acquired by User 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]

(c) 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 User by NASA.

14. Organizational Conflicts of Interest. [*Applicable when CASIS indicates or User believes that User 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, User will provide an OCI Mitigation Plan to CASIS. CASIS may make a unilateral change to the OCI Mitigation Plan as necessary.

(b) User 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 User 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 User 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, User will ensure that OCI prevention and mitigation requirements (including this clause) flow down to affected subcontractors or sub-awardees at any tier. The terms "User" and "CASIS" shall be appropriately modified to reflect the change in parties and to preserve CASIS's and the Government's rights.

15. 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.

16. 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, User 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.

17. 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]*

- (i) As used in this part, “sensitive information” refers to information that User 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, User shall provide the services specified elsewhere in this Agreement.
- (iii) If performing this Agreement entails access to sensitive information, as defined above, User 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 User’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) User will comply with all procedures and obligations specified in its Organizational Conflicts of Interest Avoidance Plan, which this Agreement incorporates as a compliance document.
- (v) The nature of the work on this Agreement may subject User 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 User'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 User for serious misconduct affecting present responsibility as a government contractor.
- (vi) User 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 User 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 User under this Agreement. By performing this Agreement, User 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) User shall identify any sensitive information submitted in support of its proposal or in performing this Agreement. For purposes of identifying sensitive information, User 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 User 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 User'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) User 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.

18. 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) User 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 User 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, User 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) User 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, User certifies that it is not a Chinese-Owned Company. User 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. User shall include the substance of this provision in all sub-awards made hereunder.

(e) *Restrictions on Certain Countries, Entities, and Persons; Export Control.*

- (i) User 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://www.nasa.gov/oiir/export-control/>. This list is regularly updated, therefore please consult the website to ensure use of the most up-to-date list. User is required to follow the most current list of NASA’s Designated Countries.
- (ii) User 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, User 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, User shall be responsible for appropriately identifying, classifying, and marking data that is subject to these regulations.
- (iii) User 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) User will be responsible for all regulatory record-keeping requirements associated with the use of licenses and license exemptions or exceptions.
- (v) User 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) User 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 User, 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.
 - (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, User shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
 - (ii) User 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) User, 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 User 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 User 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 (Non-procurement),” as implemented by NASA at 2 C.F.R. part 1880.
- (iii) User 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.
- (v) User 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, User 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.

19. Additional Terms.

(a) *Investigation of Research Misconduct [1800.917].* Recipients of this award are subject to the requirements of 14 CFR 1275, “Investigation of Research Misconduct.”