

SPECIAL CONDITIONS

For the purposes of this section (Special Conditions) of this Agreement only, the term Recipient shall mean Boeing's subcontractor.

1. Cost Principles and Accounting Standards

The expenditure of Government funds by the Recipient and the allowability of costs recognized as a resource contribution by the Recipient (See Special Condition 3, Resource Sharing Requirements) shall be governed by the FAR cost principles implemented by FAR Parts 30 and 31, and 48 CFR Part 99.

If the Recipient is a consortium which includes non-commercial firm members, cost allowability for those non-commercial members will be determined as follows: Allowability of costs incurred by State, local or federally-recognized Indian tribal governments is determined in accordance with the provisions of OMB Circular A-87, "Cost Principles for State and Local Governments." The allowability of costs incurred by non-profit organizations is determined in accordance with the provisions of OMB Circular A-122, "Cost Principles for Non-Profit Organizations." The allowability of costs incurred by institutions of higher education is determined in accordance with the provisions of OMB Circular A-21, "Cost Principles for Educational Institutions." The allowability of costs incurred by hospitals is determined in accordance with the provisions of Appendix E of 45 CFR part 74, "Principles for Determining Costs Applicable to Research and Development Under Cooperative Agreements and Contracts with Hospitals."

2. Additional Funds

Pursuant to this Agreement, BOEING is providing a fixed amount of funding for Work Activities to be undertaken under the terms of this Agreement. BOEING is under no obligation to provide additional funds. Under no circumstances shall the Recipient undertake any action which could be construed to imply an increased commitment on the part of BOEING under this Agreement.

3. Technical Publications and Reports

(a) NASA encourages the widest practicable dissemination of research results at any time during the course of the investigation.

- (1) All information disseminated as a result of this Agreement shall contain a statement which acknowledges NASA's support and identifies the Agreement (e.g., "The material contained in this report is based upon work supported by NASA under award No. NNLO9AA00A through a sub award from the National Institute of Aerospace").
- (2) Except for articles or papers published in scientific, technical, or professional journals, the exposition of results from NASA supported research should also include the following disclaimer: "Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Aeronautics and Space Administration."
- (3) As a courtesy, any release of a NASA photograph or illustration should list NASA first on the credit line followed by the name of the Recipient. An example follows:
"Photograph <or illustration, figure, etc.> courtesy of NASA <or NASA Center managing the mission or program> and the <name of the Recipient>."

(b) Reports shall be in the English language and informal in nature. The Recipient shall submit the following reports to BOEING:

- (1) A Monthly Progress Report for all but the final month of each Work Activity. Each report is due the 10th day of the month following the reporting period and shall briefly describe what was accomplished during the reporting period.
- (2) A Summary of Research is due within 60 days after completion of the Work Activity, regardless of whether or not support is continued under another Participation Agreement. This report shall be a comprehensive summary of significant accomplishments during the duration of the Work Activity.

- (c) Progress Reports and the Summary of Research shall include the following on the first page: Title and number of the Work Activity
Type of report (e.g., Progress or Summary)
Period covered by the report
Name of submitting entity
- (d) The last page of the Summary of Research shall be a completed Standard Form (SF) 298, Report Documentation Page.
- (e) Progress Reports and Summaries of Research shall be submitted by BOEING to [ACC- Deliverables@nianet.org](mailto:ACC-Deliverables@nianet.org) for official distribution to NASA.
- (f) Each center Scientific and Technical Information (STI) office is currently responsible for maintaining and storing STI produced under contracts and agreements funded by NASA.
- (1) Following receipt and approval of research reports produced under this Agreement, the NASA Technical Officer will initiate the NASA Scientific and Technical Document Availability Authorization (DAA) through the NASA Form 1676 process.
 - (2) In addition to preparing reports for final disposition by the NASA STI office, DAA review is required prior to the publication of research results in a NASA scientific or technical publication (see NPR 2200.2C "Requirements for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information").
 - (3) Upon completion of the DAA review, the NASA Technical Officer shall ensure that the DAA- approved STI and the original approved DAA form are sent to the center STI/Publication Manager. The Recipient will be advised of the final availability determination.
- (g) Data resulting from work under this Agreement may be subject to export control, national security restrictions or other restrictions designated by NASA; or, to the extent the Recipient receives or is given access to data necessary for the performance of the Work Activities which contain restrictive markings, may include proprietary information of others. **Therefore, the Recipient shall not publish, release, or otherwise disseminate, except to NASA, data produced during the performance of this Agreement, including data contained in the Summary of Research and any additional reports required by this Agreement or Work Activities, without prior review by NASA through coordination with BOEING.** Should the Recipient seek to publish, release, or otherwise disseminate data produced during the performance of this Agreement or Work Activities, the Recipient may do so once NASA has completed its document availability authorization review and the availability of the data has been determined.

4. SOFTWARE DEVELOPMENT PLANS

- (a) **CLASS D SOFTWARE (Basic Science/Engineering Design and Research and Technology Software) - As Identified in Individual Work Activities Where Recipient is the CRT Lead**

Recipient shall comply with NPR 7150.2A Requirements Mapping Matrix found at <http://snebulos.mit.edu/projects/reference/NASA-Generic/NPR-7150-002A.pdf>, which contains specific compliance requirements for Class D Software being developed or modified under individual Work Activities. Recipient shall:

- (i) Develop, execute, and maintain a Software Development Plan (SDP) for identified Class D Software.
- (ii) Develop, execute, and maintain SDP supporting documents including configuration management plan, requirements specification, design description, version description, and test plan. These supporting documents may be combined or separate documents.
- (iii) Within 20 calendar days of the Work Activity award date, submit the SDP to BOEING for submission to the [ACC- Deliverables@nianet.org](mailto:ACC-Deliverables@nianet.org) for review and approval by the Government.
- (iv) Comply with the Government approved SDP, track status relative to the Plan, and

submit any proposed changes/updates to the SDP to BOEING for submission to the ACC-Deliverables@nianet.org for review and approval by the Government.

- (v) The SDP is a living document. Therefore, some of the Plan's required content may not be known at the time of its initial development, execution and approval. Upon identifying these unknown items, Recipient shall assign and track expected closure dates for each item. Recipient shall review the SDP for status and updates at each technical meeting as required by the Work Activity.

(b) CLASS E SOFTWARE Small Light Weight Design Concept and Research and Technology Software) - As Identified in Individual Work Activities Where Recipient is the CRT Lead.

Recipient shall develop, execute, and maintain a Software Development Plan (SDP) for Class E software developed and modified under individual Work Activities.

- (i) At a minimum, the SDP shall include the following:
 - Project title
 - Project description
 - Software Manager and contact information
 - Software class = E
 - Safety-criticality determination = Not safety-critical
 - Start date and estimated completion date
 - Software requirements may be expressed:
 - as written statements of expected capabilities, outputs, and any constraints
 - as a model (e.g. use cases)
 - graphically as storyboards or screen shots
 - Description of how the project will document requirements changes
 - Description of how the project will test software product(s) and/or verify data
 - Description of how the project will version control, store, backup, release, deliver, and maintain software product(s) and data
- (ii) Within 20 calendar days of the Work Activity award date, submit the SDP to BOEING for submission to the ACC-Deliverables@nianet.org for review and approval by the Government.
- (iii) Comply with the Government approved SDP, track status relative to the Plan, and submit any proposed changes to the SDP to BOEING for submission to the ACC-Deliverables@nianet.org for review and approval.
- (iv) The SDP is a living document. Therefore, some of the Plan's required content may not be known at the time of its initial development, execution and approval. Upon identifying these unknown items, Recipient shall assign and track expected closure dates for each item. Recipient shall review the SDP for status and updates at each technical meeting required by the Work Activity.

(c) CLASS D and E SOFTWARE Where Recipient is not the CRT Lead

For those Work Activities involving Class D or Class E software where Recipient is not the CRT Lead, Recipient shall cooperate and contribute to the SDP if/as requested by the designated CRT Lead.

5. Responsibilities of the NASA Technical Officer

(a) The BOEING Technical Officer for this Agreement is identified in **Exhibit B**. The BOEING Technical Officer shall have the authority to issue written technical advice which suggests redirecting the project work (e.g., by changing the emphasis among different tasks), or pursuing specific lines of inquiry likely to assist in accomplishing the effort. The BOEING Technical Officer is not authorized to issue and the Recipient shall not follow any Technical Advice which constitutes work which is not contemplated under this Agreement; which in any manner causes an increase or decrease in the resource sharing or in the time required for performance of the project; which has the effect of changing any of the terms or conditions of the Agreement; or which interferes with the Recipient's right to perform the project in accordance with the terms and conditions of this Agreement. In the event of perceived interference, dispute resolution procedures apply as set forth in Special Condition 21, Disputes.

(b) The BOEING Procurement Agent is responsible for the contractual and compliance elements of this Agreement.

6. Modifications

During the term of this Agreement and in the interest of achieving program objectives, the parties may agree to changes that affect the responsibility statements, milestones, or other provisions of this Agreement. Any changes to this Agreement will be accomplished by a writing.

7. Equipment and Other Property

(a) Under no circumstances shall Agreement funds be used to acquire land or any interest therein, to acquire or construct facilities or to procure passenger carrying vehicles. "Facilities" as used in this section, means property used for production, maintenance, research, development, or testing. It includes plant equipment and real property (see 45.101). It does not include material, special test equipment, or special tooling.

(b) Recipient-acquired equipment or property used in performance of this Agreement shall be controlled in accordance with 48 CFR (FAR) 45.6.

(c) The Government shall have title to equipment and other personal property acquired with Government funds. Such property shall be disposed of pursuant to 48 CFR (FAR) 45.603. The Recipient shall have title to equipment and other personal property acquired with Recipient funds. Such property shall remain with the Recipient at the conclusion of this Agreement. Under a shared cost arrangement, the Government and the Recipient have joint ownership of acquired property in accordance with the cost share ratio. Jointly owned property shall be disposed of as agreed to by the parties.

(d) 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.

(e) The Recipient shall establish and maintain property management standards for Government property and otherwise manage such property as set forth in 48 CFR (FAR) 45.5 and 48 CFR (NFS) 1845.5.

(f) Recipient shall provide an enumeration of all Government-furnished property, or property purchased with Government funds under this Agreement, in its Monthly Financial Reports. A final accounting, including Recipient's recommended disposition of said property shall be provided in the Final Work Activity Financial Report.

8. Security Requirements for Unclassified Information Technology Resources

(a) The Recipient shall be responsible for Information Technology security for all systems connected to a BOEING or NASA network or operated by the Recipient for BOEING or NASA, regardless of location. This provision is applicable to all or any part of this Agreement that includes information technology resources or services in which the Recipient must have physical or electronic access to BOEING's or NASA's sensitive information contained in unclassified systems that directly support the mission of the Agency. This includes information technology, hardware, software, and the management, operation, maintenance, programming, and system administration of computer systems, networks, and telecommunications systems. Examples of tasks that require security provisions include:

- (1) Computer control of spacecraft, satellites, or aircraft or their payloads;
- (2) Acquisition, transmission or analysis of data owned by BOEING or NASA with significant replacement cost should the Recipient's copy be corrupted; and
- (3) Access to BOEING or NASA networks or computers at a level beyond that granted to the general public,
e.g. bypassing a firewall.

(b) The Recipient shall provide, implement, and maintain an IT Security Plan. This plan shall describe the processes and procedures that will be followed to ensure appropriate security of IT resources that are developed, processed, or used under this Agreement. The plan shall describe those parts of this Agreement to which this provision applies. The Recipient's IT Security Plan shall

be compliant with Federal laws that include, but are not limited to, the Computer Security Act of 1987 (40 U.S.C. 1441 et seq.) and the Government Information Security Reform Act of 2000. The plan shall meet IT security requirements in accordance with Federal and NASA policies and procedures that include, but are not limited to:

- (1) OMB Circular A-130, Management of Federal Information Resources, Appendix III, Security of Federal Automated Information Resources; and
- (2) NASA Procedural Requirement (NPR) 2810.1A, Security of Information Technology; and
- (3) NPR 1600.1A, Chapter 2, NASA Security Program Procedural Requirements.

(c) Within 30 calendar days after the Agreement award, the Recipient shall provide BOEING with either a certification that it has an existing Plan compliant with this provision, or provide a copy an IT Security Plan to BOEING for approval by NASA.

(d)(1) Recipient personnel requiring privileged access or limited privileged access to systems operated by the Recipient for BOEING or NASA or interconnected to a BOEING or NASA network shall be screened at an appropriate level in accordance with NPR 2810.1; NPR 1600.4 (Identity and Credential Management); and paragraph (d)(2) of this provision. Those Recipient personnel with non-privileged access do not require personnel screening. NASA shall provide screening using standard personnel screening National Agency Check (NAC) forms listed in paragraph (d)(3) of this provision, unless Recipient screening in accordance with paragraph (d)(4) is approved. The Recipient shall submit the required forms (with a copy to BOEING) to the NASA Center Chief of Security (CCS) within fourteen (14) calendar days after Agreement award or assignment of an individual to a position requiring screening. The forms may be obtained from the CCS. At the option of the government, interim access may be granted pending completion of the NAC.

(2) Guidance for selecting the appropriate level of screening is based on the risk of adverse impact to NASA missions. NASA defines three levels of risk for which screening is required (IT-1 has the highest level of risk):

- (i) IT-1 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause very serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of spacecraft, satellites or aircraft.
- (ii) IT-2 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of payloads on spacecraft, satellites or aircraft; and those that contain the primary copy of "level 1" data whose cost to replace exceeds one million dollars.
- (iii) IT-3 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause significant adverse impact to NASA missions. These systems include, for example, those that interconnect with a NASA network in a way that exceeds access by the general public, such as bypassing firewalls; and systems operated by the Recipient for NASA whose function or data has substantial cost to replace, even if these systems are not interconnected with a NASA network.

(3) Screening for individuals shall employ forms appropriate for the level of risk as follows:

- (i) IT-1: Fingerprint Card (FC) 258 and Standard Form (SF) 85P, Questionnaire for Public Trust Positions;
- (ii) IT-2: FC 258 and SF 85, Questionnaire for Non-Sensitive Positions; and
- (iii) IT-3: NASA Form 531, Name Check, and FC 258.

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

(f) The Recipient shall afford NASA, including the Office of Inspector General, access to the Recipient's, subcontractors' or subawardees' facilities, installations, operations, documentation, databases and personnel used in performance of this Agreement. Access shall be provided to the extent required to carry out a program of IT inspection, investigation and audit to safeguard against threats and hazards to the integrity, availability and confidentiality of BOEING or NASA

data or to the function of computer systems operated on behalf of NASA, and to preserve evidence of computer crime.

(g) The Recipient shall incorporate the substance of this clause in all subcontracts or subagreements that meet the conditions in paragraph (a) of this provision.

9. Rights in Data

(a) Definitions.

“Data,” 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, computer software and documentation thereof, and data comprising commercial and financial information.

(b) Data Categories.

(1) General: Data exchanged between BOEING and Recipient under this Agreement will be exchanged without restriction as to its disclosure, use or duplication except as otherwise provided below in this provision.

(2) Recipient Reserved Background Data: “Recipient Reserved Background Data” is Data furnished to BOEING by the Recipient which falls within the definition of “Reserved Background Technology” in the Articles of Collaboration. In the event it is necessary for Recipient to furnish BOEING with Recipient Reserved Background Data, and such Recipient Reserved Background Data is so identified with a suitable notice or legend, the Recipient Reserved Background Data will be maintained in confidence and disclosed and used by BOEING and its contractors (under suitable protective conditions at least as stringent as BOEING uses to protect its own sensitive information, but no less than a reasonable standard of care) only for the purpose of carrying out BOEING’s responsibilities under this Agreement. Upon completion of activities under this Agreement, such Recipient Reserved Background Data will be disposed of by BOEING as requested by Recipient, unless greater rights are granted by Recipient. The use of such Recipient Reserved Background Data, so identified with a suitable notice or legend, by Recipient shall be governed by the provisions of the Articles of Collaboration pertaining to Background Copyrights and Reserved Background Technology.

(3) Recipient Contributed Background Data: “Recipient Contributed Background Data” is Data furnished to BOEING by the Recipient which falls within the definition of “Contributed Background Technology” in the Articles of Collaboration. In the event it is necessary for Recipient to furnish BOEING with Recipient Contributed Background Data, and such Recipient Contributed Background Data is so identified with a suitable notice or legend, the Recipient Contributed Background Data will be maintained in confidence and disclosed and used by BOEING and its contractors (under suitable protective conditions at least as stringent as BOEING uses to protect its own sensitive information, but no less than a reasonable standard of care) only for the purpose of carrying out BOEING’s responsibilities under this Agreement. Upon completion of activities under this Agreement, such Recipient Contributed Background Data may be used and disclosed by the Government for experimental, evaluation, research and development purposes only and solely as necessary to use Data or Inventions developed under this Agreement, unless greater rights are granted by Recipient. The Government may use contractors and/or grant recipients to perform such experimental, evaluation, or research and development work. These contractors and/or cooperative agreement recipients, as well as their subcontractors and their individual employees, may be provided with Recipient Contributed Background Data submitted by the Recipient under this Agreement solely for the contractor’s and/or cooperative agreement recipient’s work to support the Government’s experimental, evaluation, or research and development work under suitable protective conditions at least as stringent as BOEING uses to protect its own sensitive information, but no less than a reasonable standard of care. The Government will not include Recipient Contributed Background Data in any solicitation for such experimental evaluation or research and development work. The use of such Recipient Contributed Background Data, so identified with a suitable notice or legend, by Recipient shall be governed by the provisions of the Articles of Collaboration pertaining to Background Copyrights and Contributed Background Technology.

(4) ACC Data: ACC Data is Data furnished to BOEING by the Recipient, developed under the Articles of Collaboration and not under this Agreement. Such ACC Data, so identified with a suitable notice or legend, shall be governed by the provisions of the Articles of Collaboration

pertaining to Project Technology and Project Copyrights. In the event it is necessary for Recipient to furnish BOEING with ACC

Data, and such ACC Data is so identified with a suitable notice or legend, the ACC Data will be maintained in confidence and disclosed and used by BOEING and its contractors (under suitable protective conditions at least as stringent as BOEING uses to protect its own sensitive information, but no less than a reasonable standard of care) only for the purpose of carrying out BOEING's responsibilities under this Agreement. Upon completion of activities under this Agreement, such ACC Data will be disposed of by BOEING as requested by Recipient, unless greater rights are granted by Recipient.

(5) Data first produced by Recipient: In the event Data first produced by Recipient in carrying out Recipient's responsibilities under this Agreement is furnished to BOEING, 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, such Data will be maintained in confidence for a period of up to five years [**specific period TBD for each Work Activity**] after development of such Data and will be disclosed and used by BOEING and its contractors (under suitable protective conditions at least as stringent as BOEING uses to protect its own sensitive information, but no less than a reasonable standard of care) only for experimental, evaluation, research and development purposes during that period, and thereafter may be used and disclosed by the Government and others acting on the Government's behalf for Government purposes (including experimental, evaluation, research and development purposes, but not including commercial purposes) only unless greater rights are granted by Recipient. Recipient agrees not to disclose such Data to any third party, other than to Cooperative Research Team Members for internal use only, without BOEING's written approval until the aforementioned restricted period expires. In order that BOEING and its contractors may exercise the right to use such Data for the purposes designated above, BOEING, upon request to the Recipient, shall have the right to review and request delivery of Data first produced by Recipient. Delivery shall be made within a time period specified by BOEING. Upon expiration of the aforementioned restricted period, the licenses specified in Paragraph 10.3(c) of the Articles of Collaboration shall apply to such Data for all non-BOEING Cooperative Research Team Members.

(6) Data first produced by BOEING: As to Data first produced by BOEING in carrying out BOEING's responsibilities under this Agreement and which Data would embody trade secrets or would comprise commercial or financial information that is privileged or confidential if it had been obtained from the Recipient, such Data will be marked with an appropriate legend and maintained in confidence for an agreed to period of up to five years [**specific period TBD for each Work Activity**] after development of such Data, with the express understanding that during the aforesaid period such Data may be disclosed and used by the Government and others acting on the Government's behalf (under suitable protective conditions) for Government purposes (including experimental, evaluation, research and development purposes) only, and thereafter for any purpose whatsoever without restriction on disclosure and use. Recipient agrees not to disclose such Data to any third party, other than to Cooperative Research Team Members for internal use only, without BOEING's written approval until the aforementioned restricted period expires. Upon expiration of the aforementioned restricted period, the licenses specified in Paragraph 10.3(c) of the Articles of Collaboration shall apply to such Data for all non-BOEING Cooperative Research Team Members.

(7) BOEING Background Data: In the event it is necessary for BOEING to furnish Recipient with Data which existed prior to, or was produced outside of, this Agreement, and such Data has restrictions governing its use and/or disclosure and such Data is so identified with a suitable notice or legend, Recipient shall use such Data (under suitable protective conditions) only for the purpose of carrying out its responsibilities under this Agreement. Upon completion of activities under this Agreement, such Data will be disposed of as requested by BOEING, unless greater rights are granted by BOEING.

(8) Copyright.

(i) In the event Data is exchanged with a notice indicating the Data is protected under copyright as a published copyrighted work, or are deposited for registration as a published work in the U.S. Copyright Office, the following paid-up licenses shall apply:

(A) If it is indicated on the Data that the Data existed prior to, or was produced outside of, this Agreement, the receiving party and others acting on its behalf may reproduce, distribute, and prepare derivative works for the purpose of carrying out the receiving party's responsibilities under

this

Agreement, unless greater rights are granted by the providing party; and

(B) If it is indicated on the Data that the Data was produced under the Articles of Collaboration, outside of this Agreement, the licenses specified in Paragraph 10.3(c) of the Articles of Collaboration shall apply to such Data for all Cooperative Research Team Members; and

(C) If the furnished Data does not contain the indication of paragraph (b)(8)(i)(A) or (B) of

this section, it will be assumed that the Data was first produced under this Agreement, and the receiving party and others acting on its behalf, shall be granted a paid up, nonexclusive, irrevocable, world-wide license for all such Data to reproduce, distribute copies to the public, prepare derivative works, and perform publicly and display publicly, by or on behalf of the receiving party. For Data that is computer software, the right to distribute shall be limited to potential users in the United States.

(ii) When claim is made to copyright a work created under a Work Activity, the Recipient shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship to the data when and if the data are delivered to the Government.

(9) Oral and visual information. If information which the Recipient considers to embody trade secrets or to comprise commercial or financial information which is privileged or confidential is disclosed orally or visually to BOEING, such information must be reduced to tangible, recorded form (i.e., converted into Data as defined herein), identified and marked with a suitable notice or legend, and furnished to BOEING within 10 business days after such oral or visual disclosure, or BOEING shall have no duty to limit or restrict, and shall not incur any liability for, any disclosure and use of such information.

(10) Disclaimer of Liability. Notwithstanding the above, BOEING shall not be restricted in, nor incur any liability for, the disclosure and use of:

(i) Data not identified with a suitable notice or legend as set in paragraph (b)(2) of this section; nor

(ii) Information contained in any Data for which disclosure and use is restricted under paragraphs (b)(2), (3) or (4) of this section, if such information is or becomes generally known without breach of the above, is known to or is generated by BOEING independently of carrying out responsibilities under this Agreement, is rightfully received from a third party without restriction, or is included in data which Recipient has, or is required to furnish to the U.S. Government without restriction on disclosure and use.

(c) Marking of Data. Any Data delivered under this Agreement, by BOEING or the Recipient, shall be marked with a suitable notice or legend to indicate any restrictions on use or disclosure in accordance with this Special Condition 10.

(d) Lower Tier Agreements. The Recipient shall include this provision, suitably modified to identify the parties, in all subcontracts or lower tier agreements, and in an appropriate legally binding instrument with Research Team Members.

10. Patent Rights

(a) Definitions.

(1) "*Administrator*" means the Procurement Agent of BOEING.

(2) "*Invention*" means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code.

(3) "*Made*" when used in relation to any invention means the conception or first actual reduction to practice of such invention.

(4) "*Nonprofit organization*" 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.

(5) "*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.

(6) "*Recipient*" means:

- (i) the signatory Recipient party or parties or;
- (ii) the Consortium, where a Consortium has been formed for carrying out

Recipient responsibilities under this Agreement.

(7) "*Small Business Firm*" means a domestic small business concern as defined at 15 U.S.C. 632 and implementing regulations of the Administrator of the Small Business Administration. (For the purpose of this definition, the size standard contained in 13 CFR 121.901 through 121.911 will be used.)

(8) "*Subject Invention*" means any invention of a Recipient and/or Government employee conceived or first actually reduced to practice in the performance of work under this Agreement.

(9) "*Manufactured substantially in the United States*" means the product must have over 50 percent of its components manufactured in the United States. This requirement is met if the cost to the Recipient of the components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all components required to make the product. (In making this determination only the product and its components shall be considered.) The cost of each component includes transportation costs to the place of incorporation into the product and any applicable duty (whether or not a duty-free entry certificate is issued). Components of foreign origin of the same class or kind for which determinations have been made in accordance with FAR 25.101(a) are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.

(b) *Allocation of Principal Rights.*

(1) *Recipient Inventions.* For other than Small Business Firm or Nonprofit organization Recipients, the "PATENT RIGHTS - RETENTION BY RECIPIENT (LARGE BUSINESS)" provision applies. For Small Business Firm and Nonprofit organization Recipients, the "PATENT RIGHTS - RETENTION BY RECIPIENT (SMALL BUSINESS)" provision applies.

(i) For small business firms and nonprofit organization, NASA may assign or transfer whatever rights it may acquire in a subject invention from its employee to the Recipient as authorized by 35 U.S.C. 202(e).

(2) *Minimum rights reserved by the Government.* Any license or assignment granted Recipient pursuant to paragraphs (b)(2), (b)(3), or (b)(4) of this section will be subject to the reservation of the following licenses:

(i) As to inventions made solely or jointly by NASA employees, the irrevocable, royalty-free right of the Government of the United States to practice and have practiced the invention by or on behalf of the United States; and

(ii) As to inventions made solely by, or jointly with, employees of NASA contractors, the rights in the Government of the United States as set forth in paragraph (b)(5)(i) of this section, as well as the revocable, nonexclusive, royalty-free license in the contractor as set forth in 14 CFR 1245.108.

(3) *Preference for United States manufacture.* The Recipient agrees that any products embodying subject inventions or produced through the use of subject inventions shall be manufactured substantially in the United States. However, in individual cases, the requirement to manufacture substantially in the United States may be waived by the Assistant Administrator for Procurement (Code HS) with the concurrence of the Associate General Counsel for Intellectual Property upon a showing by the Recipient that under the circumstances domestic manufacture is not commercially feasible.

(4) Work performed by the Recipient under this Agreement is considered undertaken to carry out a public purpose of support and/or stimulation rather than for acquiring property or services for the direct benefit or use of the Government. Accordingly, such work by the Recipient is not considered "by or for the United States" and the Government assumes no liability for infringement by the Recipient under 28 U.S.C. 1498.

11. Patent Rights - Retention by the Recipient (Large Business)

(a) Definitions.

(1) "*Administrator*," as used in this clause, means the Administrator of the National Aeronautics and Space Administration (NASA) or duly authorized representative.

(2) "*Invention*," as used in this clause, means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the U.S.C.

(3) "*Made*," as used in relation to any invention, means the conception or first actual reduction to practice of such invention.

(4) "*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.

(5) "*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.

(6) "*Reportable item*," as used in this clause, means any invention, discovery, improvement, or innovation of the Recipient, whether or not the same is or may be patentable or otherwise protectable under Title 35 of the United States Code, conceived or first actually reduced to practice in the performance of any work under this contract or in the performance of any work that is reimbursable under any clause in this contract providing for reimbursement of costs incurred prior to the effective date of this contract.

(7) "*Small business firm*," as used in this clause, means a domestic small business concern as defined at 15 U.S.C. 632 and implementing regulations of the Administrator of the Small Business Administration. (For the purpose of this definition, the size standard contained in 13 CFR 121.901 through 121.911 will be used.)

(8) "*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).

(9) "*Manufactured substantially in the United States*" means the product must have over 50 percent of its components manufactured in the United States. This requirement is met if the cost to the Recipient of the components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all components required to make the product. (In making this determination only the product and its components shall be considered.) The cost of each component includes transportation costs to the place of incorporation into the product and any applicable duty (whether or not a duty-free entry certificate is issued). Components of foreign origin of the same class or kind for which determinations have been made in accordance with Federal Acquisition Regulation 25.101(a) are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.

(b) *Allocation of principal rights.*

(1) *Presumption of title.*

(i) Any reportable item that the Administrator considers to be a subject invention shall be presumed to have been made in the manner specified in the National Aeronautics and Space Act, 51 USC 20135(b)(1) and (b)(2) (hereinafter called "the Act"), and the above presumption shall be conclusive unless at the time of reporting the reportable item the Recipient submits to the NASA Agreement Officer a written statement, containing supporting details, demonstrating that the reportable item was not made in the manner specified in 51 USC 20135(b)(1) or (b)(2).

(ii) 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)(1)(i) of this section. 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 51 USC 20135(b)(1) or (b)(2).

(2) *Property rights in subject inventions.* Each subject invention for which the presumption of paragraph (b)(1)(i) of this section is conclusive or for which there has been a determination that it was made in the manner specified in 51 USC 20135(b)(1) or (b)(2) 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)(3) of this section.

(3) *Waiver of rights.*

(i) 51 USC 20135(g) 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 51 USC 20135(b)(1) or (b)(2). The promulgated NASA Patent Waiver Regulations, 14 CFR Part 1245, Subpart 1, have adopted the Presidential memorandum on Government Patent Policy of February 18, 1983, as a guide in acting on petitions (requests) for such waiver of rights.

(ii) As provided in 14 CFR Part 1245, Subpart 1, Recipients may petition, either prior to execution of the Agreement or within 30 days after execution of the Agreement, for advance waiver of rights to any or all of the inventions that may be made under the Agreement. 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 invention in accordance with paragraph (e)(2) of this section or within such longer period as may be authorized in accordance with 14 CFR 1245.105. Further procedures are provided in Special Condition 15 Request for Waiver of Rights – Large Business.

(c) *Minimum rights reserved by the Government.*

(1) With respect to each Recipient subject invention for which a waiver of rights is applicable in accordance with 14 CFR Part 1245, Subpart 1, the Government reserves --

(i) An irrevocable, 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

(ii) Such other rights as stated in 14 CFR 1245.107.

(2) Nothing contained in this paragraph 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.*

(1) The Recipient is hereby granted a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a Recipient 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)(2) of this section. 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 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 Recipient's business to which the invention pertains.

(2) 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 14 CFR Part 1245, Subpart 3, Licensing of NASA 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.

(3) 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 calendar 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, in accordance with 14 CFR 1245.112, any decision concerning the revocation or modification of its license.

(e) *Invention identification, disclosures, and reports.*

(1) 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 clause within six months of conception and/or first actual reduction to practice, whichever occurs first in the performance of work under this contract. 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 a description of such procedures for evaluation and for determination as to their effectiveness.

(2) The Recipient will disclose each reportable item to the NIA Agreement Officer within two months after the inventor discloses it in writing to Recipient personnel responsible for the administration of this clause 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 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 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.

(3) NIA will be responsible for filing the following two reports on behalf of Recipient, however Recipient must cooperate in providing the information necessary for NIA to be compliant with this provision:

(i) Interim reports every 12 months from the date of the Agreement, 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)(1) of this section have been followed.

(ii) A final report, within three months after completion of the Agreement, 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.

(4) The Recipient agrees, upon written request of the NIA Agreement Officer, 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.

(5) The Recipient agrees, subject to 48 CFR (FAR) 27.302(j) 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 clause.

(f) Examination of records relating to inventions.

(1) The NASA Agreement Officer or any authorized representative shall, pursuant to the Retention and Examination of Records provision of this Agreement, 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 contract to determine whether -

(i) Any such inventions are subject inventions;

(ii) The Recipient has established and maintained the procedures required by paragraph (e)(1) of this section; and

(iii) The Recipient and its inventors have complied with the procedures.

(2) If the NASA or NIA learn of an unreported Recipient invention that is believed may be a subject invention, the Recipient may be required to disclose the invention for a determination of ownership rights.

(3) Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.

(g) Subcontracts.

(1) Unless otherwise authorized or directed by the NIA Agreement Officer, the Recipient shall --

(i) Include this provision Patent Rights - Retention by the Recipient - (Large Business) (suitably modified to identify the parties) in any 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

(ii) Include Special Condition 14 Patent Rights Patent Right - Retention by the Recipient - (Small Business) (suitably modified to identify the parties) in any subcontract hereunder (regardless of tier) with a small business firm or nonprofit organization for the performance of experimental, developmental, or research work.

(2) In the event of a refusal by a prospective subcontractor to accept such a clause the Recipient –

(i) Shall promptly submit a written notice to the NIA Agreement Officer setting forth the subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and

(ii) Shall not proceed with such subcontract without the written authorization of the NIA Agreement Officer.

(3) The Recipient shall promptly notify the NIA Agreement Officer in writing upon the award of any subcontract at any tier containing a patent rights clause by identifying the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the NIA Agreement Officer, the Recipient shall furnish a copy of such subcontract, and, no more frequently than annually, a listing of the subcontracts that have been awarded.

(4) The subcontractor will retain all rights provided for the Recipient in the clause of paragraph (g)(1)(i) or (1)(ii) of this section, whichever is included in the subcontract, and the Recipient will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(5) Notwithstanding paragraph (g)(4) of this section, and in recognition of the contractor's substantial contribution of funds, facilities and/or equipment to the work performed under this Agreement, the Recipient is authorized, subject to the rights of NASA set forth elsewhere in this clause, to:

(i) Acquire by negotiation and mutual agreement rights to a subcontractor's subject inventions as the Recipient may deem necessary to obtaining and maintaining of such private support; and

(ii) Request, in the event of inability to reach agreement pursuant to paragraph (g)(5)(i) of this section, that NASA invoke exceptional circumstances as necessary pursuant to 37 CFR 401.3(a)(2) if the prospective subcontractor is a small business firm or organization, or for all other organizations, request that such rights for the Recipient be included as an additional reservation in a waiver granted pursuant to 14 CFR Part 1245, Subpart 1. Any such requests to NASA should be prepared in consideration of the following guidance and submitted to the NASA Agreement Officer.

(A) Exceptional circumstances: A request that NASA make an "exceptional circumstances" determination pursuant to 37 CFR 401.3(a)(2) must state the scope of rights sought by the Recipient pursuant to such determination; identify the proposed subcontractor and the work to be performed under the subcontract; and state the need for the determination.

(B) Waiver petition: The subcontractor should be advised that unless it requests a waiver of title pursuant to the NASA Patent Waiver Regulations (14 CFR Part 1245, Subpart 1), NASA will acquire title to the subject invention (51 U.S.C. 20135). If a waiver is not requested or granted, the Recipient may request a license from NASA (see licensing of NASA inventions, 14 CFR Part 1245, Subpart 3). A subcontractor requesting a waiver must follow the procedures set forth in Special Condition 15 Request for Waiver of Rights – Large Business.

(h) *Preference for United States manufacture*. The Recipient agrees that any products embodying subject inventions or produced through the use of subject inventions shall be manufactured substantially in the United States. However, in individual cases, the requirement to manufacture substantially in the United States may be waived by the Assistant Administrator for Procurement (Code HS) with the concurrence of the Associate General Counsel for Intellectual Property upon a showing by the Recipient that under the circumstances domestic manufacture is not commercially feasible.

(i) *March-in rights*. The Recipient 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 CFR 401.6 and any supplemental regulations of the agency to require the Recipient, 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 the Subcontractor, assignee, or exclusive licensee refuses such a request NASA has the right to grant such a license itself if the Federal agency determines that--

(1) Such action is necessary because the Recipient 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;

(2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the 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 Recipient, assignee, or licensees; or

(4) Such action is necessary because the agreement required by paragraph (i) of this clause 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.

12. Patent Rights - Retention by the Recipient (Small Business)

(a) Definitions.

(1) "*Invention*," as used in this clause, means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the U.S.C.

(2) "*Made*," as used in this clause, when used in relation to any invention means the conception or first actual reduction to practice such invention.

(3) "*Nonprofit organization*," as used in this clause, 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 (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

(4) "*Practical application*," as used in this clause, means to manufacture, in the case of a composition of 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.

(5) "*Small business firm*," as used in this clause, 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 clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.901 through 121.911 will be used.

(6) "*Subject invention*," as used in this clause, means any invention of the Subcontractor conceived or first actually reduced to practice in the performance of work under this Cooperative Agreement.

(7) "*Manufactured substantially in the United States*" means the product must have over 50 percent of its components manufactured in the United States. This requirement is met if the cost to the Recipient of the components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all components required to make the product. (In making this determination only the product and its components shall be considered.) The cost of each component includes transportation costs to the place of incorporation into the product and any applicable duty (whether or not a duty-free entry certificate is issued). Components of foreign origin of the same class or kind for which determinations have been made in accordance with FAR 25.101(a) are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.

(b) *Allocation of principal rights.* The Recipient may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Recipient 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 Recipient.*

(1) The Recipient will disclose each subject invention to NIA within two months after the inventor discloses it in writing to Recipient personnel responsible for patent matters. The disclosure shall be in

the form of a written report and shall identify the contract 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 the agency, the Recipient will promptly notify the agency of the acceptance of any manuscript describing the invention for publication or of any sale or public use planned by the Recipient.

(2) The Recipient will elect in writing whether or not to retain title to any such invention by notifying NIA within two years of disclosure to the Federal agency. 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 the Government to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Recipient 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. The Recipient will file patent applications in additional countries or international patent offices within either 10 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.

(4) Requests for extension of the time for disclosure election, and filing under paragraphs (c)(1), (2), and (3) of this section may, at the discretion of the Government, be granted.

(d) *Conditions when the Government may obtain title.* The Recipient will convey to NASA, upon written request, title to any subject invention -

(1) If the Recipient fails to disclose or elect title to the subject invention within the times specified in paragraph (c) of this section, or elects not to retain title; provided, that the agency may only request title within 60 calendar days after learning of the failure of the Recipient to disclose or elect within the specified times.

(2) In those countries in which the Recipient fails to file patent applications within the times specified in paragraph (c) of this section; provided, however, that if the Recipient has filed a patent application in a country after the times specified in paragraph (c) of this section, but prior to its receipt of the written request of the Federal agency, the Recipient shall continue to retain title in that country.

(3) In any country in which the Recipient 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 Recipient and protection of the Recipient right to file.*

(1) The Recipient will retain a nonexclusive, royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Recipient fails to disclose the invention within the times specified in paragraph (c) of this section. The Recipient's license extends to its domestic subsidiary 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 agreement was awarded. The license is transferable only with the approval of NASA, except when transferred to the successor of that part of the Recipient's business to which the invention pertains.

(2) The Recipient's domestic license may be revoked or modified by NASA to the extent necessary to achieve expeditious practical application of subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR 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 the Subcontractor has achieved practical application and continues to make the benefits of the invention reasonable accessible to the public. The license in any foreign country may be revoked or modified at the discretion of NASA to the extent the Subcontractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(3) Before revocation or modification of the license, NASA will furnish the Recipient a written notice of its intention to revoke or modify the license, and the Recipient will be allowed 30 days (or such other time as may be authorized by NASA 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, in accordance with applicable regulations in 37 CFR Part 404 and 14 CFR Subpart 1245.1, concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of the license.

(f) *Recipient action to protect the Government's interest.*

(1) The Recipient 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 the Subcontractor elects to retain title, and,

(ii) convey title to the Federal agency when requested under paragraph (d) of this section and to enable the Government to obtain patent protection throughout the world in that subject invention.

(2) The Recipient 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 the Recipient each subject invention made under contract in order that the Recipient can comply with the disclosure provisions of paragraph (c) of this section, 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 paragraph (c)(1) of this section. The Recipient 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.

(3) The Recipient 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 30 calendar days before the expiration of the response period required by the relevant patent office.

(4) The Recipient agrees to include, within the specification of any United States patent application 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 NASA. The Government has certain rights in the invention."

(5) The Recipient shall provide the NASA Agreement Officer the following:

(i) A listing every 12 months (or such longer period as the NASA Agreement Officer may specify) from the date of the Cooperative Agreement, of all subject inventions required to be disclosed during the period.

(ii) A final report prior to closeout of the Cooperative Agreement listing all subject inventions or certifying that there were none.

(iii) Upon request, the filing date, serial number, and title, a copy of the patent application, and patent number and issue date for any subject invention in any country in which the Recipient has applied for patents.

(iv) An irrevocable power to inspect and make copies of the patent application file, by the Government, when a Federal Government employee is a co-inventor.

(g) *Subcontracts.*

(1) Unless otherwise authorized or directed by the NIA Agreement Officer, the Recipient shall --

(i) Include this provision Patent Rights - Retention by the Recipient (Small Business), 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; and

(ii) Include in all other subcontracts, regardless of tier, for experimental, developmental, or research work Special Provision 12 (Patent Rights - Retention by the Recipient (Large Business)).

(2) In the event of a refusal by a prospective subcontractor to accept such a clause the Recipient--

(i) Shall promptly submit a written notice to the NIA Agreement Officer setting forth the subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and

(ii) Shall not proceed with such subcontract without the written authorization of the NIA Agreement Officer.

(3) The Recipient shall promptly notify the NIA Agreement Officer in writing upon the award of

any subcontract at any tier containing a patent rights clause by identifying the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the NIA Agreement Officer, the Recipient shall furnish a copy of such subcontract, and, no more frequently than annually, a listing of the subcontracts that have been awarded.

(4) The subcontractor will retain all rights provided for the Recipient in the provision under paragraph (g)(1)(i) or (g)(1)(ii) of this section, whichever is included in the subcontract, and the Recipient will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(5) Notwithstanding paragraph (g)(4) of this section, and in recognition of the contractor's substantial contribution of funds, facilities and/or equipment to the work performed under this Cooperative Agreement, the Recipient is authorized, subject to the rights of NASA set forth elsewhere in this clause, to--

(i) Acquire by negotiation and mutual agreement rights to a subcontractor's subject inventions as the Recipient may deem necessary to obtaining and maintaining of such private support; and

(ii) Request, in the event of inability to reach agreement pursuant to paragraph (g)(5)(i) of this section that NASA invoke exceptional circumstances as necessary pursuant to 37 CFR 401.3(a)(2) if the prospective subcontractor is a small business firm or organization, or for all other organizations, request that such rights for the Recipient be included as an additional reservation in a waiver granted pursuant to 14 CFR Part 1245, Subpart 1. Any such requests to NASA should be prepared in consideration of the following guidance and submitted to the contract office:

(A) Exceptional circumstances: A request that NASA make an "exceptional circumstances" determination pursuant to 37 CFR 401.3(a)(2) must state the scope of rights sought by the Recipient pursuant to such determination; identify the proposed subcontractor and the work to be performed under the subcontract; and state the need for the determination.

(B) Waiver petition: The subcontractor should be advised that unless it requests a waiver of title pursuant to the NASA Patent Waiver Regulations (14 CFR Part 1245, Subpart 1), NASA will acquire title to the subject invention (51 U.S.C. 20135). If a waiver is not requested or granted, the Recipient may request a license from NASA (see licensing of NASA inventions, 14 CFR Part 1245, Subpart 3). A subcontractor requesting a waiver must follow the procedures set forth in Special Condition 15, Requests for Waiver of Rights – Large Business.

(h) Reporting on utilization of subject inventions. The Recipient 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 the Recipient 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 the Recipient, and such other data and information as the agency may reasonably specify. The Recipient also agrees to provide additional reports as may be requested by the agency in connection with any march-in proceeding under-taken by the agency in accordance with paragraph (i) of this section. As required by 35 U.S.C. 202(c)(5), the agency agrees it will not disclose such information to persons outside the Government without permission of the Recipient.

(i) Preference for United States manufacture. The Recipient agrees that any products embodying subject inventions or produced through the use of subject inventions shall be manufactured substantially in the United States. However, in individual cases, the requirement to manufacture substantially in the United States may be waived by the Assistant Administrator for Procurement (Code HS) with the concurrence of the Associate General Counsel for Intellectual Property upon a showing by the Recipient that under the circumstances domestic manufacture is not commercially feasible.

(j) March-in rights. The Recipient 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 CFR 401.6 and any supplemental regulations of the agency to require the Recipient, 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 the Subcontractor, assignee, or exclusive licensee refuses such a request NASA has the right to grant such a license itself if the Federal agency determines that-

(1) Such action is necessary because the Recipient 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;

(2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the 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 Recipient, assignee, or licensees; or

(4) Such action is necessary because the agreement required by paragraph (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 the Recipient is a nonprofit organization, it agrees that--

(1) 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 one of its primary functions the management of inventions; provided, that such assignee will be subject to the same provisions as the Recipient;

(2) The Recipient 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 CFR 401.10;

(3) The balance of any royalties or income earned by the Recipient 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

(4) It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and that it will give a preference to a small business firm when licensing a subject invention if the Recipient 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 the Recipient 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 the Recipient. However, the Recipient agrees that the Secretary of Commerce may review the Contractor's licensing program and decisions regarding small business applicants, and the Recipient will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when the Secretary's review discloses that the Recipient could take reasonable steps to more effectively implement the requirements of this paragraph.

(l) *Documentation submissions.* A copy of all submissions or requests required by this clause, plus a copy of any reports, manuscripts, publications, or similar material bearing on patent matters, shall be sent to the installation Patent Counsel in addition to any other submission requirements in the Cooperative Agreement. If any reports contain information describing a "subject invention" for which the Recipient has elected or may elect title, NASA will use reasonable efforts to delay public release by NASA or publication by NASA in a NASA technical series, in order for a patent application to be filed, provided that the Recipient identify the information and the "subject invention" to which it relates at the time of submittal. If required by the NASA Agreement Officer, the Recipient 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 the Recipient has applied for patents.

13. Requests for Waiver of Rights - Large Business

(a) In accordance with the NASA Patent Waiver Regulations, 14 CFR Part 1245, Subpart 1, waiver of rights to any or all inventions made or that may be made under a NASA agreement, contract or subcontract with other than a small business firm or a domestic nonprofit organization may be requested at different time periods. Advance waiver of rights to any or all inventions that may be made under a contract or subcontract may be requested prior to the execution of the agreement, contract or subcontract, or within 30 calendar days after execution by the selected Recipient. In addition, waiver of rights to an identified invention made and reported under an agreement, contract or subcontract may be requested, even though a request for an advance waiver was not made or, if made, was not granted.

(b) Each request for waiver of rights shall be by petition to the Administrator and shall include an identification of the petitioner; place of business and address; if petitioner is represented by counsel, the name, address, and telephone number of the counsel; the signature of the petitioner or authorized representative; and the date of signature. No specific forms need be used, but the request should contain a positive statement that waiver of rights is being requested under the NASA Patent Waiver Regulations; a clear indication of whether the request is for an advance waiver or for a waiver of rights for an individual identified invention; whether foreign rights are also requested and, if so, the countries, and a citation of the specific Section or Sections of the regulations under which such rights are requested; and the name, address, and telephone number of the party with whom to communicate when the request is acted upon. Requests for advance waiver of rights should, preferably, be included with the proposal, but in any event in advance of negotiations.

(c) Petitions for advance waiver, prior to agreement execution, must be submitted to the NASA Agreement Officer with a copy to NIA. All other petitions will be submitted to the Patent Representative designated in Special Condition 16.

(d) Petitions submitted with proposals selected for negotiation of an agreement will be forwarded by the NASA Agreement Officer to the installation Patent Counsel for processing and then to the Inventions and Contributions Board. The Board will consider these petitions and where the Board makes the findings to support the waiver, the Board will recommend to the Administrator that waiver be granted, and will notify the petitioner and the NASA Agreement Officer of the Administrator's determination. The NASA Agreement Officer will be informed by the Board whenever there is insufficient time or information or other reasons to permit a decision to be made without unduly delaying the execution of the agreement. In the latter event, the petitioner will be so notified by the NASA Agreement Officer. All other petitions will be processed by installation Patent Counsel and forwarded to the Board. The Board shall notify the petitioner of its action and if waiver is granted, the conditions, reservations, and obligations thereof will be included in the Instrument of Waiver. Whenever the Board notifies a petitioner of a recommendation adverse to, or different from, the waiver requested, the petitioner may request reconsideration under procedures set forth in the Regulations.

14. Designation of New Technology Representative and Patent Representative

(a) For purposes of administration of Special Condition 13, entitled "Patent Rights – Retention by the Contractor (Large Business) or Special Condition 14, Patent Rights – Retention by the Contractor (Small Business), the following named representatives are hereby designated to administer such provision:

New Technology Representative

Michelle Dail
Mail Stop 218, NASA Langley Research Center
Hampton, VA 23681-2199
e-mail: Michelle.A.Dail@nasa.gov

Patent
Representative

Office of Chief
Counsel 5 Langley
Boulevard
Mail Stop 30, NASA Langley Research Center
Hampton, VA 23681-2199

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the NIA Agreement Officer. Inquiries or requests regarding disposition of rights, election of rights, or related matters should also be directed to the NIA Agreement Officer. This provision shall be included in any subcontract hereunder requiring Special Condition 13, entitled "Patent Rights – Retention by the Contractor (Large Business) or

Special Condition 14, Patent Rights – Retention by the Contractor (Small Business), unless otherwise authorized or directed by the NIA Agreement Officer. The respective responsibilities and authorities of the above-named representatives are set forth in NASA FAR Supplement (NFS) 1827.305-370.

15. Restrictions on Sale or Transfer of Technology to Foreign Firms or Institutions

(a) The parties agree that access to technology developments under this Agreement by foreign firms or institutions must be carefully controlled. For purposes of this clause, a transfer includes a sale of the company, or sales or licensing of the technology. Transfers include:

- (1) Sales of products or components,
- (2) Licenses of software or documentation related to sales of products or components, or
- (3) Transfers to foreign subsidiaries of the Recipient for purposes related to this Agreement.

(b) The Recipient shall provide timely notice to the NIA Agreement Officer in writing of any proposed transfer of technology developed under this Agreement. If it is determined that the transfer may have adverse consequences to the national security interests of the United States, or to the establishment of a robust United States industry, NASA and the Recipient shall jointly endeavor to find alternatives to the proposed transfer which obviate or mitigate potential adverse consequences of the transfer.

16. Export Licenses

(a) The Recipient shall comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this Agreement. In the absence of available license exemptions/exceptions, the Recipient shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance.

(b) The Recipient shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this Agreement, including instances where the work is to be performed on-site at NASA Langley Research Center, or any other NASA Center, where the foreign person will have access to export-controlled technical data or software.

(c) The Recipient shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.

(d) The Recipient shall be responsible for ensuring that the requirements of this provision apply to its subcontractors.

(e) The Recipient may request, in writing, that the NIA Agreement Officer authorize it to export ITAR-controlled technical data (including software) pursuant to the exemption at 22 CFR 125.4(b)(3). The NIA Agreement Officer or designated representative may authorize or direct the use of the exemption where the data does not disclose details of the design, development, production, or manufacture of any defense article.

17. Investigation of Research Misconduct

Recipients of this Agreement are subject to the requirements of 14 CFR Part 1275, "Research Misconduct."

18. Liability and Risk of loss

(a) With regard to activities undertaken pursuant to this Agreement, no party shall make any claim against the other, employees of the other, the other's Related Entities (e.g., contractors, subcontractors), or employees of the other's Related Entities for any injury to or death of its own employees or employees of its Related Entities, or for damage to or loss of its own property or that of its Related Entities, whether such injury, death, damage or loss arises through negligence or otherwise, except in the case of willful misconduct.

(b) To the extent that a risk of damage or loss is not dealt with expressly in this Agreement, each

party's liability to the other party arising out of this Agreement, whether or not arising as a result of an alleged breach of this Agreement, shall be limited to direct damages only, and shall not include any loss of revenue or profits or other indirect or consequential damages.

19. Disputes

In the event either party has a dispute over the terms and conditions of, performance under, or action related to this Agreement, it shall be identified to the other Party's Authorized Official in writing.

Pending resolution of the dispute, the Recipient shall proceed diligently with the performance of this Agreement and any issued Work Activities.

(a) Informal Resolution

1. The Parties shall attempt in good faith to resolve any dispute by direct, informal discussion between the appropriate Key Personnel to this Agreement. All negotiations shall be confidential.

2. The Parties will meet to resolve the dispute within 30 days of receipt of the dispute notice. In the event that the dispute cannot be resolved through informal resolution, the Parties shall undertake formal resolution action, in accordance with Special Condition 21(b).

(b) Formal Resolution

1. If a dispute has not been resolved by informal resolution, it may be submitted to binding arbitration upon agreement of both Parties, by and in accordance with the Commercial Arbitration Rules of the American Arbitration Association (AAA). If arbitration is agreed to by both Parties, such decision is irrevocable and the outcome of the arbitration shall be binding on the Parties.

2. Each Party to the arbitration shall pay its pro rata share of the arbitration fees, not including counsel fees or witness fees or other expenses incurred by the Party for its own benefit.

3. Judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction.

(c) If arbitration is declined for such disputes, the Parties may pursue litigation in any court of competent jurisdiction.

20. Suspension or Termination

(a) This Agreement may be suspended or terminated in whole or in part by the Recipient or by BOEING after consultation with the other party. With prior written notice, BOEING may terminate this Agreement, for example, if the Recipient is not making anticipated technical progress, if the Recipient materially fails to comply with the terms of this Agreement, if the Recipient materially changes the objective of this Agreement, or if appropriated funds are not available to support the program.

(b) Upon fifteen (15) calendar days written notice to the other party, either party may temporarily suspend this Agreement, pending corrective action or a decision to terminate this Agreement. The notice should express the reasons why this Agreement is being suspended.

(c) In the event of termination by either party, the Recipient shall not be entitled to additional funds or payments except as may be required by the Recipient to meet BOEING's commitments which had in the judgment of BOEING become firm prior to the effective date of termination and are otherwise appropriate.

21. Civil Rights

Work on NASA Cooperative Agreements is subject to the provisions of Title VI of the Civil Rights Act of 1964 (Public Law 88-352; 42 U.S.C. 2000d-l), Title IX of the Education

Amendments of 1972 (20 U.S.C. 1680 et seq.), section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.), and the NASA implementing regulations (14 CFR Parts 1250, 1251, 1252 and 1253).

22. Clean Air and Water Pollution Control Acts

If this Agreement or supplement thereto is in excess of \$100,000, the Recipient agrees to notify BOEING and the NIA Agreement Officer promptly of the receipt, whether prior or subsequent to the Recipient's acceptance of this Agreement, of any communication from the Director, Office of Federal Activities, Environmental Protection Agency (EPA), indicating that a facility to be utilized under or in the performance of this Agreement or any subcontract thereunder is under consideration to be listed on the EPA "List of Violating Facilities" published pursuant to 40 CFR 15.20. By acceptance of a Cooperative Agreement in excess of \$100,000, the Recipient--

- (a) Stipulates that any facility to be utilized thereunder is not listed on the EPA "List of Violating Facilities" as of the date of acceptance;
- (b) Agrees to comply with all requirements of section 114 of the Clean Air Act, as amended (42 U.S.C. 1857 et seq. as amended by Public Law 91-604) and section 308 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq. as amended by Public Law 92-500) relating to inspection, monitoring, entry, reports and information, and all other requirements specified in the aforementioned sections, as well as all regulations and guidelines issued thereunder after award of and applicable to the Agreement; and
- (c) Agrees to include the criteria and requirements of this clause in every subcontract hereunder in excess of \$100,000, and to take such action as the Contracting or NASA Agreement Officer may direct to enforce such criteria and requirements.

23. Debarment and Suspension and Drug-Free Workplace

NASA Agreements are subject to the provisions of 2 CFR Part 180, Government-wide Debarment and Suspension (Nonprocurement) and 14 CFR Part 1267, Government-wide requirements for Drug-Free Workplace, unless excepted by 2 CFR 180.110 or 180.610.

24. Foreign National Employee Investigative Requirements

In the event there is a need for a foreign national employee or subcontractor to access a NASA facility, this will be handled through NIA, who will coordinate the necessary paperwork as described below. Document submission shall be made to NIA, not NASA.

- (a) The Recipient shall submit a properly executed Name Check Request (NASA Form 531) and a completed applicant fingerprint card (Federal Bureau of Investigation Card FD-258) for each foreign national employee requiring access to a NASA Installation. These documents shall be submitted to the Installation's Security Office at least 75 days prior to the estimated duty date. The NASA Installation Security Office will request a National Agency Check (NAC) for foreign national employees requiring access to NASA facilities. The NASA Form 531 and fingerprint card may be obtained from the NASA Installation Security Office.
- (b) The Installation Security Office will request from NASA Headquarters, Code I, approval for each foreign national's access to the Installation prior to providing access to the Installation. If the access approval is obtained from NASA Headquarters prior to completion of the NAC and performance of the Agreement requires a foreign national to be given access immediately, the NASA Technical Officer may submit an escort request to the Installation's Chief of Security.

25. Restrictions on Lobbying

This award is subject to the provisions of 14 CFR Part 1271 "New Restrictions on Lobbying."

26. Travel and Transportation

- (a) For travel funded by this Agreement, section 5 of the International Air Transportation Fair

Competitive Practices Act of 1974 (49 U.S.C. 40118) (Fly America Act) requires the Recipient to use U.S.-flag air carriers for international air transportation of personnel and property to the extent that service by those carriers is available.

(b) Department of Transportation regulations, 49 CFR Part 173, govern Recipient shipment of hazardous materials and other items.

27. Retention and Examination of Records

Financial records, supporting documents, statistical records, and all other records (or microfilm copies) pertinent to this Agreement shall be retained for a period of 3 years, except that records for nonexpendable property acquired with Agreement funds shall be retained for 3 years after its final disposition and, if any litigation, claim, or audit is started before the expiration of the 3-year period, the records shall be retained until all litigation, claims, or audit findings involving the records have been resolved. The retention period starts from the date of the submission of BOEING's final invoice. The Administrator of NASA and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any pertinent books, documents, papers, and records of the Recipient and of subcontractors to make audits, examinations, excerpts, and transcripts. All provisions of this clause shall apply to any subcontractor performing substantive work under this Agreement.

28. Safety

NASA's safety priority is to protect: (1) the public, (2) astronauts and pilots, (3) the NASA workforce (including contractor employees working on NASA contracts), and (4) high-value equipment and property.

(a) The Recipient shall act responsibly in matters of safety and shall take all reasonable safety measures in performing under this Agreement. The Recipient shall comply with all applicable federal, state, and local laws relating to safety. The Recipient shall maintain a record of, and will notify the NIA Agreement Officer immediately (within one workday) of any accident involving death, disabling injury or substantial loss of property. The Recipient will immediately (within one workday) advise NIA of hazards that come to its attention as a result of the work performed.

(b) Where the work under this Agreement involves flight hardware, the hazardous aspects, if any, of such hardware will be identified, in writing, by the Recipient. Compliance with this provision by subcontractors shall be the responsibility of the Recipient.

29. Breach of Safety or Security

Safety is the freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment. Safety is essential to NASA and is a material part of this Agreement. NASA's safety priority is to protect: (1) the public; (2) astronauts and pilots; (3) the NASA workforce (including contractor employees working on NASA contracts); and (4) high-value equipment and property. A major breach of safety by the Recipient entitles the Government to remedies (pending corrective measures by the Recipient) which include suspension or termination of this Agreement, require removal or change of Recipient's personnel from performing under the Agreement. A major breach of safety must be related directly to the work on the Agreement. A major breach of safety is an act or omission of the Recipient that consists of an accident, incident, or exposure resulting in a fatality or mission failure; or in damage to equipment or property equal to or greater than \$1 million; or in any "willful" or "repeat" violation cited by the Occupational Safety and Health Administration (OSHA) or by a state agency operating under an OSHA approved plan.

(a) Security is the condition of safeguarding against espionage, sabotage, crime (including computer crime), or attack. A major breach of security by the Recipient entitles the Government to remedies (pending corrective measures by the Recipient) which include, suspension or termination of the Agreement, require removal or change of Recipient's personnel from performing under the Agreement. A major breach of security may occur on or off Government installations, but must be related directly to the work on the Agreement. A major breach of

security may arise from any of the following: compromise of classified information; illegal technology transfer; workplace violence resulting in criminal conviction; sabotage; compromise or denial of information technology services; damage or loss greater than \$250,000 to the Government; or theft.

(b) In the event of a major breach of safety or security, the Recipient shall report the breach to the NIA Agreement Officer. If directed by the NIA Agreement Officer, the Recipient shall conduct its own investigation and report the results to the Government and NIA. The Recipient shall cooperate with the Government investigation, if conducted.

30. Application of Federal, State, and Local Laws and Regulations

(a) Federal Laws and Regulations. This Agreement shall be governed by the Federal Laws, regulations, policies, and related administrative practices applicable to this Agreement on the date the Agreement is executed. The Recipient understands that such Federal laws, regulations, policies, and related administrative practices may be modified from time to time. The Recipient agrees to consider modifying this Agreement to be governed by those later modified Federal laws, regulations, policies, and related administrative practices that directly affect performance of the project.

(b) State or Territorial Law and Local Law. Except to the extent that a Federal statute or regulation preempts State or territorial law, nothing in this Agreement shall require the Recipient to observe or enforce compliance with any provision thereof, perform any other act, or do any other thing in contravention of any applicable State or territorial law; however, if any of the provisions of the Agreement violate any applicable State or territorial law, or if compliance with the provisions of the Agreement would require the Recipient to violate any applicable State or territorial law, the Recipient agrees to notify the NIA immediately in writing in order that appropriate arrangements are made to proceed with the Work Activity as soon as possible.

(c) Changed Conditions of Performance (Including Litigation). The Recipient agrees to notify NIA immediately of any change in State or local law, conditions, or any other event that may significantly affect its ability to perform in accordance with the terms of this Agreement. In addition, the Recipient agrees to notify the NIA immediately of any decision pertaining to the Recipient's conduct of litigation that may affect the Government's or NIA's interests in the Agreement or the Government's or NIA's administration or enforcement of applicable Federal laws or regulations. Before the Recipient may name the Government or NIA as a party to litigation for any reason, the Recipient agrees to inform the Government and NIA; this proviso applies to any type of litigation whatsoever, in any forum.

(d) No Government or NIA Obligations to Third Parties. Absent the Government's or NIA's express written consent, and notwithstanding any concurrence by the Government or NIA in or approval of the award of any agreement of the Recipient (third party contract) or subcontract of the Recipient (third party subcontract) or the solicitation thereof, the Government and NIA shall not be subject to any obligations or liabilities to third party contractors or third party subcontractors or any other person(s).

31. Requirements for Federal Funding Accountability and Transparency Act Implementation

NIA will be responsible for the reporting of Subawards and Executive Compensation; however, Recipient is responsible for ensuring it is compliant with the spirit of this Special Condition and shall provide any information requested by BOEING or NIA in pursuit of its compliance with this requirement.

(a) Reporting of first-tier subawards.

1. Applicability. Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates \$25,000 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in paragraph e. of this award term).

2. Where and when to report.

i. You must report each obligating action described in paragraph a.1. of this award term to <http://www.fsr.gov>.

ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported no later than December 31, 2010.)

3. What to report. You must report the information about each obligating action that the submission instructions posted at <http://www.fsrs.gov>.

(b) Reporting Total Compensation of Recipient Executives.

1. Applicability and what to report. You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—

i. the total Federal funding authorized to date under this award is \$25,000 or more;

ii. in the preceding fiscal year, you received—

(A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR

170.320 (and subawards); and

(B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR

170.320 (and subawards); and

iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15

U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>)

2. Where and when to report. You must report executive total compensation described in paragraph b.1. of this award term:

i. As part of your registration profile at <http://www.ccr.gov>. By the end of the month following the month in which this award is made, and annually thereafter.

(c) Reporting of Total Compensation of Subrecipient Executives.

1. Applicability and what to report. Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—

i. in the subrecipient's preceding fiscal year, the subrecipient received—

(A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR

170.320 (and subawards); and

(B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15

U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>)

2. Where and when to report. You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

i. To the Recipient.

ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

(d) Exemptions. If, in the previous tax year, you had gross income, from all sources, under \$300,000, you are exempt from the requirements to report:

- i. Subawards, and
 - ii. The total compensation of the five most highly compensated executives of any subrecipient.
- (e) Definitions. For purposes of this award term:
1. Entity means all of the following, as defined in 2 CFR Part 25:
 - i. A Governmental organization, which is a State, local government, or Indian tribe;
 - ii. A foreign public entity;
 - iii. A domestic or foreign nonprofit organization;
 - iv. A domestic or foreign for-profit organization;
 - v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.
 2. Executive means officers, managing partners, or any other employees in management positions.
 3. Subaward:
 - i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
 - ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. 210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations").
 - iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.
 4. Subrecipient means an entity that:
 - i. Receives a subaward from you (the recipient) under this award; and
 - ii. Is accountable to you for the use of the Federal funds provided by the subaward.
 5. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):
 - i. Salary and bonus.
 - ii. Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
 - iii. Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
 - iv. Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
 - v. Above-market earnings on deferred compensation, which is not tax-qualified.
 - vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

34. Restrictions on Funding Activities with China for Awards Subject to 14 CFR § 1274

- (a) 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 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.
- (b) "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.
- (c) The restrictions in the Acts do not apply to commercial items of supply necessary to perform a Cooperative Agreement.

(d) Subawards - The recipient shall include the substance of this provision in all subawards made hereunder.

35. Assurance of Compliance - China Funding Restriction

An Assurance of Compliance with 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 herein after referred to as "the Acts", whereas:

(a) NASA is restricted from using funds appropriated in the Acts to enter into or fund any Cooperative Agreement of any kind to participate, collaborate, or coordinate bilaterally with China or any Chinese- owned company, at the prime recipient level and at all subrecipient levels, whether the bilateral involvement is funded or performed under a no-exchange of funds arrangement.

(b) 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.

(c) The restrictions in the Acts do not apply to commercial items of supply needed to perform a Cooperative Agreement.

(d) By submission of its proposal, the proposer represents that the proposer is not China or a Chinese-owned company, and that the proposer will not 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.

36. Equal Employment Opportunity

This Agreement is subject to E.O. 11246, "Equal Employment Opportunity," as amended by E.O. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and as supplemented by regulations at 41 CFR Part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

37. Copeland "Anti-Kickback" Act (40 U.S.C. 276c)

All contracts in excess of \$50,000 for construction or repair awarded by Recipients and sub-recipients shall include a provision for compliance with the Copeland "Anti-Kickback" Act, as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or grants from the United States"). The Act provides that each recipient or sub-recipient shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he is otherwise entitled. The recipient shall report all suspected or reported violations to NASA.

38. Contract Work Hours and Safety Standards Act (40 U.S.C. 327-334)

Where applicable, all contracts awarded by recipients in excess of \$2,000 for construction contracts and in excess of \$50,000 for other contracts, other than contracts for commercial items, that involve the employment of mechanics or laborers shall include a provision for compliance with sections 102 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-334), as supplemented by Department of Labor regulations (29 CFR Part 5). Under Subsection 102 of the Act, each recipient shall be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than 1 1/2 times the basic rate of pay for all hours worked in excess of 40 hours in the work week. Section 107 of the Act is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of

intelligence.

39. Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), as amended

Contracts, other than contracts for commercial items, of amounts in excess of \$100,000 shall contain a provision that requires the Recipient to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq.). Violations shall be reported to NASA and the Regional Office of the Environmental Protection Agency (EPA).

40. Byrd Anti-Lobbying Amendment (31 U.S.C.1352)

Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, cooperative agreement or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the Recipient.

41. Debarment and Suspension (E.O.s 12549 and 12689)

No contract shall be made to parties listed on the General Services Administration's List of Parties Excluded from Federal Procurement or Non-procurement Programs in accordance with E.O.s 12549 and 12689, "Debarment and Suspension." This list contains the names of parties debarred, suspended, or otherwise excluded by agencies, and contractors declared ineligible under statutory or regulatory authority other than E.O. 12549. Contractors with awards that exceed the simplified acquisition threshold shall provide the required certification regarding its exclusion status and that of its principal employees.

42. Disclosure of lobbying activities (SF-LLL)

- (a) NASA Agreement Officers shall provide one copy of each SF-LLL furnished under 14 CFR 1271.110 to the Procurement Officer for transmittal to the Director, Analysis Division (Code HC).
- (b) Suspected violations of the statutory prohibitions implemented by 14 CFR Part 1271 shall be reported to the Director, Contract Management Division (Code HK).