

CUSTOMER CONTRACT REQUIREMENTS
High Power Thin-Film Solar Array Engineering Model Design and Demonstration
CUSTOMER CONTRACT FA9453-10-2-0102

CUSTOMER CONTRACT REQUIREMENTS

The following customer contract requirements apply to this contract to the extent indicated below.

1. Prime Contract Special Provisions The following prime contract special provisions apply to this purchase order

Section 1

For subrecipient/subawards, the following apply:

2.012 TRAFFICKING IN PERSONS (DEC 2007)

(a) Provisions applicable to a recipient that is a private entity.

(1) You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not—

(i) Engage in severe forms of trafficking in persons during the period of time that the award is in effect;

(ii) Procure a commercial sex act during the period of time that the award is in effect; or

(iii) Use forced labor in the performance of the award or subawards under the award.

(2) We may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity —

(i) Is determined to have violated a prohibition in paragraph a.1 of this award term; or

(ii) Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either--

(A) Associated with performance under this award; or

(B) Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Government wide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 , CFR, Subtitle B, Chapter XI, Part 1 125

(b) Provision applicable to a recipient other than a private entity. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity--

(1) Is determined to have violated an applicable prohibition in paragraph a.1 of this award term;

or

(2) Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either—

(i) Associated with performance under this award; or

(ii) Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 , CFR, Subtitle B, Chapter XI, Part 1 125

(c) Provisions applicable to any recipient.

(1) You must inform us immediately of any information you alleging a violation of a prohibition in paragraph a.1 of this award term.

(2) Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:

(i) Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and

(ii) Is in addition to all other remedies for noncompliance that are available to us under this award.

(3) You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.

(d) Definitions. For purposes of this award term:

(1) "Employee" means either:

(i) An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or

(ii) Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.

(2) "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

(3) "Private entity":

(i) Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.

(ii) Includes:

(A) A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR175.25(b).

(B) A for-profit organization.

(4) "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

PRS-2002 BUY AMERICAN REQUIREMENT UNDER SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (NOV 2009)

The contractor will comply with requirements as per 2 CFR Part 176, Subpart B - Buy American Requirement Under Section 1605 of the American Recovery and Reinvestment Act of 2009.

PRS-2003 WAGE RATE REQUIREMENTS UNDER SECTION 1606 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009. (NOV 2009)

The Contractor will comply with 2 CFR Part 176, Subpart C - Wage Rate Requirements Under Section 1606 of the American Recovery and Reinvestment Act of 2009.

3.041 PROPERTY (APR 2000)

(a) Recipients may purchase real property or equipment in whole or in part with federal funds under an award only with the prior approval of the agreements officer (except that additional approval is not required for such items included in the proposed/negotiated budget at the time of award).

(b) Equipment is defined as tangible nonexpendable personal property charged directly to the award having a useful life of more than one year and an acquisition cost of \$5,000.00 or more per unit.

(c) Title to all real property and equipment purchased by the recipient under this agreement is vested in the recipient subject to the conditions that the recipient:

(1) Use the real property or equipment for the authorized purposes of the project until funding for the project ceases, or until the property is no longer needed for the purposes of the project.

(2) Not encumber the property without approval of the agreements officer.

(3) Use and dispose of the property in accordance with paragraphs (d), (e) and (f) of this article.

(d) During the time that the real property or equipment is used on this program the recipient shall make it available for use on other projects or programs, if such other use will not interfere with the work on this program. Use of the real property or equipment on other projects will be in the following order of priority:

(1) Activities sponsored by DoD Components' grants, cooperative agreements, or other assistance awards;

(2) Activities sponsored by other Federal agencies' grants, cooperative agreements, or other assistance awards;

(

3) Activities under Federal procurement contracts, or activities not sponsored by any Federal agency. If so used, use charges shall be assessed to those activities. For real property or equipment, the use charges shall be at rates equivalent to those for which comparable real property or equipment may be leased. The use charges shall be treated as program income.

(e) After Federal funding for the project ceases, or when the real property or equipment is no longer needed for the purposes of the project, the recipient may use the real property or equipment for other projects, insofar as:

(1) There are Federally sponsored projects for which the real property or equipment may be used. If the only use for the real property or equipment is for projects that have no Federal sponsorship, the recipient shall proceed with disposition of the real property or equipment, in accordance with paragraph (f) of this section.

(2) The recipient obtains written approval from the agreements officer to do so. The agreements officer shall ensure that there is a formal change of accountability for the real property or equipment to a currently funded, Federal award.

(3) The recipient's use of the real property or equipment for other projects is in the same order of priority as described in paragraph (d) of this section.

f) Disposition. When an item of real property or equipment is no longer needed for Federally sponsored projects, the recipient shall proceed as follows:

(1) If the property that is no longer needed is equipment (rather than real property), the recipient may wish to replace it with an item that is needed currently for the project. In that case, the recipient may use the original equipment as trade-in or sell it and use the proceeds to offset the costs of the replacement equipment, subject to the approval of the responsible agency.

(2) The recipient may elect to retain title, without further obligation to the Federal Government, by compensating the Federal Government for that percentage of the current fair market value of the real property or equipment that is attributable to the Federal participation in the project.

(3) If the recipient does not elect to retain title to real property or equipment (see paragraph (f)(2) of this section), or request approval to use equipment as trade-in or offset for replacement equipment (see paragraph (f)(1) of his section), the recipient shall request disposition instructions from the agreements officer.

3.050 PROPERTY MANAGEMENT (JUN 2001)

The recipient's property management system shall include the following, for property that is Federally owned, and for equipment that is acquired in whole or in part with Federal funds:

(a) Property records shall be maintained, to include the following information:

- (1) A description of the property.
- (2) Manufacturer's serial number, model number, Federal stock number, national stock number, or any other identification number.
- (3) Source of the property, including the award number.
- (4) Whether title vests in the recipient or the Federal Government.
- (5) Acquisition date (or date received, if the property was furnished by the Federal Government) and cost.
- (6) Information from which one can calculate the percentage of Federal participation in the cost of the property (not applicable to property furnished by the Federal Government).
- (7) The location and condition of the property and the date the information was reported.
- (8) Ultimate disposition data, including date of disposal and sales price or the method used to determine current fair market value where a recipient compensates the Federal Government for its share.

(b) Federally owned equipment shall be marked, to indicate Federal ownership.

(c) A physical inventory shall be taken and the results reconciled with the property records at least once every two years. Any differences between quantities determined by the physical inspection and those shown in the accounting records shall be investigated to determine the causes of the difference. The recipient shall, in connection with the inventory, verify the existence, current utilization, and continued need for the property.

d) A control system shall be in effect to insure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft of property shall be investigated and fully documented; if the property was owned by the Federal Government, the recipient shall promptly notify the Federal agency responsible for administering the property.

(e) Adequate maintenance procedures shall be implemented to keep the property in good condition.

3.060 GOVERNMENT FURNISHED PROPERTY (APR 2000) (TAILORED)

(a) The following Government owned property will be provided to the recipient for use on this program. All property is to be furnished "as is." Title to Government-owned property (equipment and supplies) shall remain vested in the Government.

List of Government Property from DARPA Fast Program

<u>Items to be reused</u>	<u>Qty</u>	<u>Condition</u>
Deployment Test Article	1	Reconditioned
Structure RUBAs	2	Used

CASS (MCAs) will NOT be reused. Tether Beams, RUBA rollers and End Beam will be reused. Valance box may be reused depending on IBIS roll Vs fold trade study. Minor modifications may be required. RUBAs will be reused, without modification.

Offloader Balloon	27	Reconditioned
Offloader balloons will be reused after patching any leaks. Includes string and clip assemblies. Includes 15 spherical and 12 cylindrical custom Mylar balloons.		

Stiffness Test Fixtures	3	Used
Brackets and fixtures used for structural stiffness Testing will be reused		

(b) Annual Inventory. Recipients shall submit annually an inventory listing of all Federally owned property in their custody, to the agreements administration office responsible for administering the property under the award.

(c) Use on other activities.

(1) Use of federally owned property on other activities is permissible, if authorized by the agreements officer.

(2) Use on other activities will be in the following order of priority:

(i) Activities sponsored by Air Force grants, cooperative agreements, or other assistance awards;

(ii) Activities sponsored by other Federal agencies' grants, cooperative agreements, or other assistance awards;

(iii) Activities under Federal procurement contracts, or activities not sponsored by any Federal agency. If so used, use charges shall be assessed to those activities. For real property or equipment, the use charges shall be at rates equivalent to those for which comparable real property or equipment may be leased. The use charges shall be treated as program income.

(d) Disposition of property. Upon completion of the award, the recipient shall report the property to the agreements officer and request disposition instructions.

4.030 AUDIT (JUL 2003) (TAILORED)

(a) If the recipient expends \$500,000 or more in one year under Federal awards they shall have an audit performed for that year by an independent auditor, in accordance with DoDGARs 34.16. The audit should be made a part of the regularly scheduled, annual audit of the recipient's financial statements. However, the recipient may have Federal awards separately audited, if it elects to do so unless prohibited by Federal laws or regulations.

(b) The recipient shall notify the agreements officer and the agreements administrative office in writing of any audits performed as per 4.030 (a), above. The written notification will include the auditors name, address, and telephone number.

4.041 RETENTION AND ACCESS TO RECORDS (APR 2000)

(a) Recipient's financial records, supporting documents, statistical records, and all other records pertinent to an award shall be retained and access to them permitted for a period not to exceed three years after expiration of the term of this agreement unless one of the following applies:

(1) 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 and final action taken.

(2) Records for real property and equipment acquired with Federal funds shall be retained for 3 years after final disposition.

(3) When records are transferred to or maintained by the DoD Component that made the award, the 3-year retention requirement is not applicable to the recipient.

(4) Indirect cost rate proposals, cost allocations plans, and related records, for which retention requirements are specified in DoDGARs 34.42(g).

(b) If the information described is maintained on a computer, recipients shall retain the computer data on a reliable medium for the time period prescribed. Recipients may transfer computer data in machine readable form from one reliable computer medium to another. Recipients' computer data retention and transfer procedures shall maintain the integrity, reliability, and security of the original computer data. Recipients shall also maintain an audit trail describing the data transfer.

(c) The agreements officer shall request that recipients transfer certain records to DoD component custody when he or she determines that the records possess long term retention value.

6.020 INVENTIONS (JUN 2001) (TAILORED)

(a) Definitions

(1) "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).

(2) "Subject invention" means any invention of the recipient conceived or first actually reduced to practice in the performance of work under this agreement, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of agreement performance.

(3) "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.

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

(5) "Small Business Firm" means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this article, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.

(6) "Nonprofit Organization" means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c) and exempt from taxation under section 501(a) of the Internal Revenue Code (25 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

(b) Allocation of Principal Rights

(1) The recipient may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this article and 35 U.S.C. 203. With respect to any subject invention in which the recipient retains title, the 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 the Government within 2 months after the inventor discloses it in writing to recipient personnel responsible for patent matters. The disclosure to the Government shall be in the form of a written report and shall identify the agreement under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the Government, the recipient will promptly notify the Government of the acceptance of any manuscript describing the invention for publication or of any on 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 the Government within 2 years of disclosure to the Government. 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 1 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 6 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 subparagraphs (1), (2), and (3) may, at the discretion of the Government, be granted.

(d) Conditions When the Government May Obtain Title

The recipient will convey to the Government, 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 (c), above, or elects not to retain title; provided that the Government may only request title within 60 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 (c) above; provided, however, that if the recipient has filed a patent application in a country after the times specified in (c) above, but prior to its receipt of the written request of the Government, 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 (c), above. 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 the Government except when transferred to the successor of that party of the recipient's business to which the invention pertains.

(2) The recipient's domestic license may be revoked or modified by the Government to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR part 404 and Government licensing regulations (if any). 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 Government to the extent the recipient, 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, the Government 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 the Government 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 Government regulations (if any) 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 the Government all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the recipient elects to retain title, and (ii) convey title to the Government when requested under paragraph (d) above 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 an agreement in order that the recipient can comply with the disclosure provisions of paragraph (c), above, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by (c)(1), above. 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 the Government 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 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 applications and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the agreement) awarded by (identify the Federal Agency). The Government has certain rights in the invention."

(g) Lower Tier Agreements

The recipient will include this article, suitably modified to identify the parties, in all lower tier agreements, regardless of tier, for experimental, developmental or research work. Each subrecipient will retain all rights provided for the recipient in this article, and the recipient will not, as part of the consideration for awarding a subrecipient award, obtain rights in a subrecipient's subject inventions.

(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 Government may reasonably specify. The recipient also agrees to provide additional reports as may be requested by the Government in connection with any march-in proceeding undertaken by the Government in accordance with paragraph (j) of this article. As required by 35 U.S.C. 202(c)(5), the Government agrees it will not disclose such information to persons outside the Government without permission of the recipient.

(i) Preference for United States Industry

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

(j) March-in Rights

The recipient agrees that with respect to any subject invention in which it has acquired title, the Government has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the Government 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 if the recipient, assignee, or exclusive licensee refuses such a license itself if the Government 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 article 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 the Government, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the recipient;

(2) The recipient will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when the Government 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 invention 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 may review the recipient'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 when the Secretary's review discloses that the recipient could take reasonable steps to implement more effectively the requirements of this paragraph (k)(4).

6.022 DATA RIGHTS (AUG 2001) (TAILORED)

(a) Definitions

"Government purposes", as used in this article, means any activity in which the United States Government is a party, including cooperative agreements with international or multinational defense organizations, or sales or transfers by the United States Government to foreign governments or international organizations. Government purposes include competitive procurement, but do not include the rights to use, modify, reproduce, release, perform, display, or disclose data for commercial purposes or authorize others to do so.

"Government purpose rights", as used in this article, means the right to –

(1) Use, modify, reproduce, release, perform, display, or disclose technical data within the Government without restriction; and

(2) Release or disclose technical data outside the Government and authorize persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose that data for United States government purposes.

"Limited rights", as used in this article, means rights to use, modify reproduce, release, perform, display, or disclose technical data, in whole or within part, within the Government. The Government may not, without the written permission of the party asserting limited rights, release or disclose the technical data outside the

Government, use the technical data for manufacture, or authorize the technical data to be used by another party.

"Unlimited rights", as used in this article, means rights to use, modify, reproduce, perform, display, release, or disclose data in whole or in part, in any manner, and for any purpose whatsoever, and to have or authorize others to do so.

"Data", as used in this article, means recorded information, regardless of form or method or recording, which includes but is not limited to, technical data, software, trade secrets, and mask works. The term does not include financial, administrative, cost, pricing or management information and does not include subject inventions included under the article entitled Inventions.

"Practical application", as used in this article, 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.

(b) Allocation of Principal Rights

(1) Ownership rights to data generated under this agreement shall vest in the recipient. This agreement shall be performed with mixed Government and recipient funding and the parties agree that in consideration for Government funding, the recipient intends to reduce to practical application items, components and processes developed under this agreement.

(2) The recipient agrees to retain and maintain in good condition until five (5) years after completion or termination of this agreement, all data necessary to achieve practical application. In the event of exercise of the Government's march-in rights as set forth under the Article entitled Inventions, the recipient agrees, upon written request from the Government, to deliver at no additional cost to the Government, all data necessary to achieve practical application within 60 days from the date of the written request. The Government shall have unlimited rights to this delivered data.

(3) With respect to data delivered pursuant to Part 7 of this agreement, Technical and Financial Reporting, the Government shall receive limited rights.

(c) Marking of Data.

(1) Any data delivered under this agreement shall be marked with the following legend:

Limited Rights

Agreement No.: FA9453-10-2-0102

Recipient's Name:

Recipient's Address:

The Government may use, modify, reproduce, release, perform, display or disclose technical data, in whole or within part, within the Government. The Government may not, without the written permission of the party asserting limited rights, release or disclose the technical data outside the Government, use the technical data for manufacture, or authorize the technical data to be used by another party.

Requirements concerning data and software rights are as follows: Unless waived by the DoD Component making the award, the Federal Government has the right to: (i) Obtain, reproduce, publish or otherwise use for the Federal Government purposes the data first produced under an award; (ii) Authorize others to receive, reproduce, publish or otherwise use such data for Federal purposes.

(2) Any trade secrets and commercial or financial information the recipient wishes to protect from release under Freedom Of Information Act (FOIA) requirements must be marked with a legend identifying it as

privileged or confidential information.

(d) Lower Tier Agreements. The recipient shall include this article, suitably modified to identify the parties, in all subcontracts or lower tier agreements, regardless of tier, for experimental, developmental, or research work.

(e) Distribution Statement. In addition to any marking relative to ownership data, any data delivered under this agreement shall be marked with the following distribution statement that indicates to whom it may be distributed:

DISTRIBUTION STATEMENT B:

"Distribution authorized to U.S. Government Agencies Only: Proprietary Information. Other requests for this document shall be referred to the Program Manager, Air Force Research Laboratory/RVSV, 3550 Aberdeen Ave SE, Kirtland AFB, NM 87117-5776."

EXPORT CONTROL WARNING

WARNING: This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C. Sec. 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C. App 2401, et seq. Violations of these export control laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25.

6.030 FOREIGN ACCESS TO TECHNOLOGY (APR 2000) (TAILORED)

(a) Definitions

"Foreign firm or institution" means a firm or institution organized or existing under the laws of a country other than the United States, its territories, or possessions. The term includes, for purposes of this agreement, any agency or instrumentality of a foreign government, and firms, institutions or business organizations which are owned or substantially controlled by foreign governments, firms, institutions, or individuals.

"Know-how" means all information including, but not limited to, discoveries, formulas, materials, inventions, processes, ideas, approaches, concepts, techniques, methods, software, programs, documentation, procedures, firmware, hardware, technical data, specifications, devices, apparatus and machines.

"Technology" means discoveries, innovations, know-how and inventions, whether patentable or not, including computer software, recognized under U.S. law as intellectual creations to which rights of ownership accrue, including, but not limited to, patents, trade secrets, mask works, and copyrights developed under this agreement.

(b) General. The parties agree that research findings and technology developments in "High Power Thin-Film Solar Array Engineering Model Design and Demonstration." technology may constitute a significant enhancement to the national defense, and to the economic vitality of the United States. Accordingly, access to important technology developments under this agreement by foreign firms or institutions must be carefully controlled. The controls contemplated in this article are in addition to, and are not intended to change or supersede, the provisions of the International Traffic in Arms Regulation (22 CFR pt. 120 et seq.), the DOD Industrial Security Regulation (DOD 5220.22-R) and the Department of Commerce Export Regulation (15 CFR pt. 770 et seq.)

(c) Restrictions on Sale or Transfer of Technology to Foreign Firms or Institutions.

(1) In order to promote the national security interests of the United States and to effectuate the policies that underlie the regulations cited above, the procedures stated in subparagraphs C.2, C.3, and C.4 below shall apply to any transfer of technology. For purposes of this paragraph, a transfer includes a sale of the company, and sales or licensing of technology. Transfers do not include:

(i) sales of products or components, or
(ii) licenses of software or documentation related to sales of products or components, or
(iii) transfer to foreign subsidiaries of the recipient (recipient participants) for purposes related to this agreement, or
(iv) transfer which provides access to technology to a foreign firm or institution which is an approved source of supply or source for the conduct of research under this agreement provided that such transfer shall be limited to that necessary to allow the firm or institution to perform its approved role under this agreement.

(2) The recipient shall provide timely notice to the Government of any proposed transfer from the recipient of technology developed under this agreement to foreign firms or institutions. If the Government determines that the transfer may have adverse consequences to the national security interests of the United States, the recipient, its vendors, and the Government shall jointly endeavor to find alternatives to the proposed transfer which obviate or mitigate potential adverse consequences of the transfer but which provide substantially equivalent benefits to the recipient.

(3) In any event, the recipient shall provide written notice to the agreements officer and Government program manager of any proposed transfer to a foreign firm or institution at least 60 days prior to the proposed date of transfer. Such notice shall cite this article and shall state specifically what is to be transferred and the general terms of the transfer. Within 30 days of receipt of the recipient's written notification, the agreements officer shall advise the recipient whether it consents to the proposed transfer. In cases where the Government does not concur or 60 days after receipt and the Government provides no decision, the recipient may utilize the procedures under the article entitled Claims, Disputes and Appeals. No transfer shall take place until a decision is rendered.

(4) Except as provided in subparagraph C.1 above and in the event the transfer of technology to foreign firms or institutions is not approved by the Government, but the transfer is made nonetheless, the recipient shall (a) refund to the Government the funds paid for the development of the technology and (b) negotiate a license with the Government to the technology under terms that are reasonable under the circumstances.

(d) Lower Tier Agreements. The recipient shall include this article, suitably modified to identify the parties, in all subcontracts or lower tier agreements, regardless of tier, for experimental, development, or research work.

(e) This article shall remain in effect during the term of the agreement and for five (5) years thereafter.

PRS-7001 REPORTING AND REGISTRATION REQUIREMENT UNDER SECTION AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009. (NOV 2009)

(a) This award requires the recipient to complete projects or activities which are funded American Recovery and Reinvestment Act of 2009 (Recovery Act) and to report on use funds provided through this award. Information from these reports will be made available

(b) The reports are due no later than ten (10) calendar days after each calendar quarter recipient receives the assistance award funded in whole or in part by the Recovery Act.

(c) Recipients and their first-tier recipients must maintain current registrations in the Central Registration (<http://www.ccr.gov>) at all times during which they have active federal awards Recovery Act funds. A Dun and Bradstreet Date Universal Numbering System (DUNS) (<http://www.dnb.com>) is one of the requirements for registration in the Central Contractor

(d) The recipient shall report the information described in Section 1512(c) of the Recovery reporting instructions and data elements that will be provided online at <http://www.FederalReporting>. and ensure that any information that is pre-filled is corrected or updated as needed.

PRS-7002 SINGLE AUDIT INFORMATION FOR RECIPIENTS OF RECOVERY ACT FUNDS (NOV 2009)

(a) To maximize the transparency and accountability of funds authorized under the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5)(Recovery Act) as required by Congress and in accordance with 2 CFR 215.21 "Uniform Administrative Requirements for Grants and Agreements" and OMB Circular A-102 Common Rules provisions, recipients agree to maintain records that identify adequately the source and application of Recovery Act funds. OMB Circular A-102 is available at <http://www.whitehouse.gov/omb/circulars/a102/a102.html>

(b) For recipients covered by the Single Audit Act Amendments of 1996 and OMB Circular A-133 "Audits of States, Local Governments, and Non-Profit Organizations," recipients agree to separately identify the expenditures for Federal awards under the Recovery Act on the Schedule of Expenditures of Federal Awards (SEFA) and the Data Collection Form (SF-SAC) required by OMB Circular A-133. OMB Circular A-133 is available at <http://www.whitehouse.gov/omb/circulars/a133/a133.html>. This shall be accomplished by identifying expenditures for Federal awards made under the Recovery Act separately on the SEFA, and as separate rows under Item 9 of Part III on the SF-SAC by CFDA number, and inclusion of prefix "ARRA-" in identifying the name of the Federal program on the SEFA and as the first characters in Item 9d of Part III on the SF-SAC.

(c) Recipients agree to separately identify to each subrecipient, and document at the time of subaward, and at the time of disbursement of funds, the Federal award number, CFDA number, and the amount of Recovery Act funds. When a recipient awards Recovery Act funds for an existing program, the information furnished to subrecipients shall distinguish the subawards of incremental Recovery Act funds from regular subawards under the existing program.

(d) Recipients agree to require their subrecipients to include on their SEFA information to specifically identify Recovery act funding similar to the requirements for the recipient SEFA information to specifically identify Recovery Act funding similar to the requirements for the recipient SEFA described above. This information is needed to allow the recipient to properly monitor subrecipient expenditure of ARRA funds as well as oversight by the Federal awarding agencies, Offices of Inspector General and the Government Accountability Office.

8.010 USING TECHNICAL INFORMATION RESOURCES (APR 2000)

To the extent practical, the recipient will use the technical information resources of the Defense Technical Information Center (DTIC) and other Government or private facilities to investigate recent and on-going research and avoid needless duplication of scientific and engineering effort.

**8.020 ADMINISTRATIVE REQUIREMENTS FOR SUBAWARDS AND CONTRACTS (APR 2000)
(TAILORED)**

(a) The recipients shall apply to each subaward the administrative requirements of the DoDGARs applicable to the type of subrecipient. DoDGARs Part 32 shall be applied to awards to universities or other nonprofit organizations, DoDGARs Part 33 shall be applied to awards to state and local governments, and DoDGARs Part 34 shall be applied to for-profit entities.

(b) Recipients awarding contracts under this agreement shall assure that contracts awarded contain, as a minimum, the provisions in Appendix A to DoDGARs Part 34. Full text of Part 34 may be accessed electronically at this address: <http://www.dtic.mil/whs/directives/corres/html/32106r.htm>

8.031 PROCUREMENT STANDARDS (AUG 2001)

The recipient will:

(a) Follow basic principles of business intended to produce in all contracts entered into under this agreement.

(b) Comply with federal statutes, executive orders, regulations, and other legal requirements applicable to contracts entered into under this agreement.

9.013 ASSURANCES (FEB 2001)

(a) By signing or accepting funds under the agreement, the recipient assures that it will comply with applicable provisions of the following National policies on:

(1) Prohibiting discrimination:

(i) On the basis of race, color, or national origin, in Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d, et seq.), as implemented by DoD regulations at 32 CFR part 195;

(ii) On the basis of age, in the Age Discrimination Act of 1975 (42 U.S.C. 6101, et seq.) as implemented by Department of Health and Human Services regulations at 45 CFR part 90;

(iii) On the basis of handicap, in Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), as implemented by Department of Justice regulations at 28 CFR part 41 and DoD regulations at 32 CFR part 56;

(2) The Clean Air Act (42 U.S.C. 7401, et seq.) and Clean Water Act (33 U.S. 1251, et seq.), as implemented by Executive Order 11738 (3 CFR, 1971-1975 Comp., p. 799).

(b) The recipient shall obtain assurances of compliance from contractors and recipients at lower tiers.

9.020 U.S. FLAG AIR CARRIERS (NOV 1999)

Travel supported by U.S. Government funds under this agreement shall use U.S.-flag air carriers (air carriers holding certificates under 49 U.S.C. 41102) for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118) and the interpretative guidelines issued by the Comptroller General of the United States in the March 31, 1981, amendment to Comptroller General Decision B138942. (See General Services Administration amendment to the Federal Travel Regulations, Federal Register (Vol 63, No. 219, 63417-63421.))

Section 2

For procurements (vs. sub-awards), the following apply:

1. Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). A contractor submitting a bid to the recipient for a contract award of \$100,000 or more must file a certification with the recipient that it has not and will not use Federal appropriations for certain lobbying purposes. The contractor also must disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. For further details, see 32 CFR part 28, the DoD's codification of the Government wide common rule implementing this amendment.

2. Debarment and suspension. A contract award with an amount expected to equal or exceed \$25,000 and certain other contract awards (see 2 CFR 1125.220, which implements OMB guidance in 2 CFR 180.220) shall not be made to parties listed on the Government wide Excluded Parties List System, in accordance with the DoD adoption at 2 CFR part 1125 of the OMB guidance implementing E.O.s 12549 (3 CFR, 1986 Comp., p. 189) and 12689 (3 CFR, 1989 Comp., p. 235), "Debarment and Suspension." The Excluded Parties List System accessible on the Internet at www.epls.gov contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than

E.O. 12549.

Section 3

For construction work performed with Federal funds or recipient funds counted toward required cost sharing, the following apply:

1. Equal Employment Opportunity. Although construction work should happen rarely under a TIA, the agreements officer in that case should inform the recipient that Department of Labor regulations at 41 CFR 60-1.4(b) prescribe a clause that must be incorporated into construction awards and subawards. Further details are provided in Appendix B to Part 22 of the DoDGARs (32 CFR part 22), in section b. under the heading "Nondiscrimination."

8.020 ADMINISTRATIVE REQUIREMENTS FOR SUBAWARDS AND CONTRACTS (APR 2000) (TAILORED)

(a) The recipients shall apply to each subaward the administrative requirements of the DoDGARs applicable to the type of subrecipient. DoDGARs Part 32 shall be applied to awards to universities or other nonprofit organizations, DoDGARs Part 33 shall be applied to awards to state and local governments, and DoDGARs Part 34 shall be applied to for-profit entities. (b) Recipients awarding contracts under this agreement shall assure that contracts awarded contain, as a minimum, the provisions in Appendix A to DoDGARs Part 34. Full text of Part 34 may be accessed electronically at this address: <http://www.dtic.mil/whs/directives/corres/html/32106r.htm> .